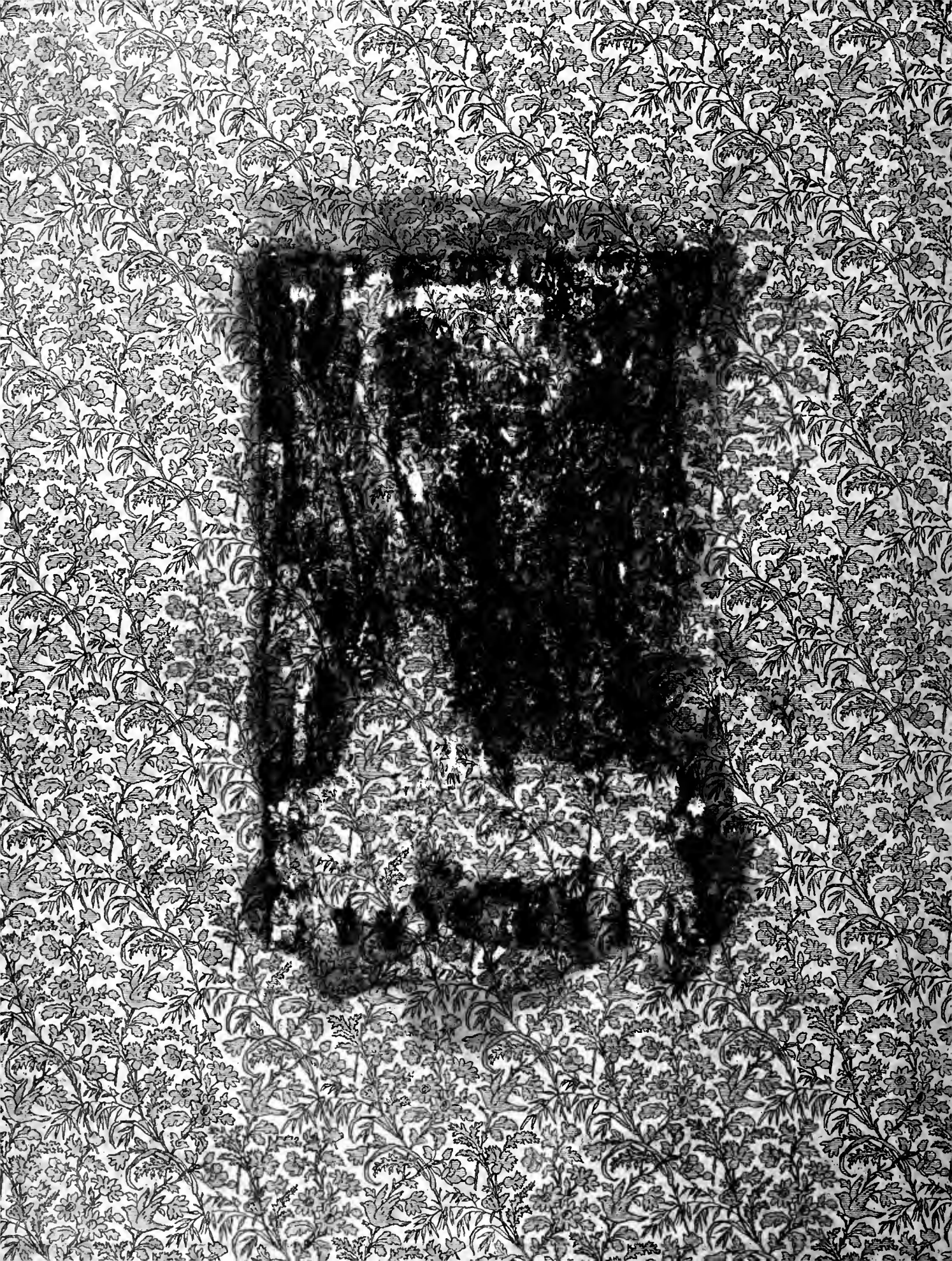
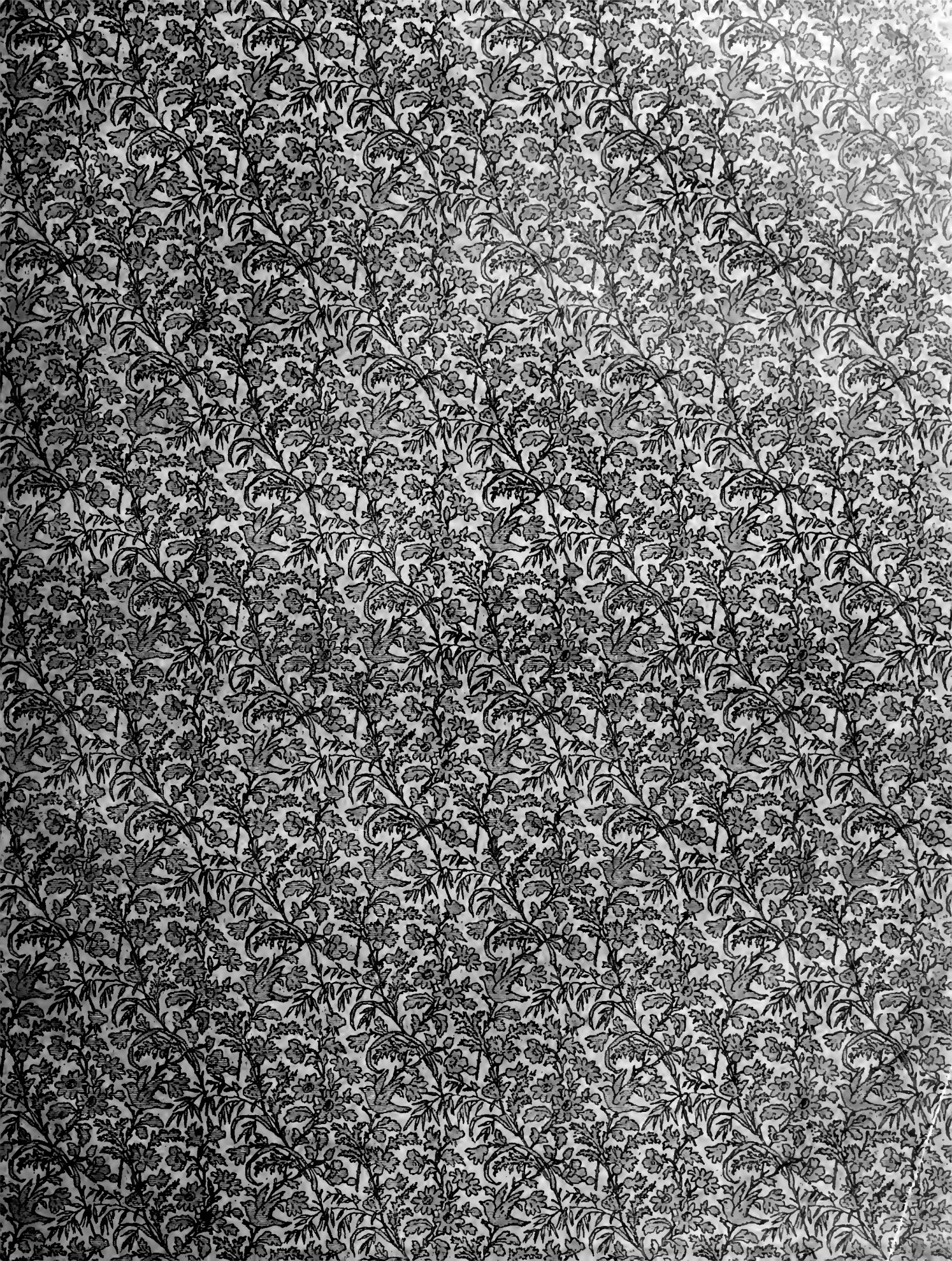
RAMBLES ON THE GOLDEN COAST

OF NEW ZEALAND

ILLUSTRATED





RAMBLES

ON

THE GOLDEN COAST

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THE GOLDEN COAST

OF

THE SOUTH ISLAND

OF

NEW ZEALAND

BY

R. C. REID

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TO

THE HONOURABLE ROBERT STOUT,

PREMIER OF NEW ZEALAND,

This Volume

IS RESPECTFULLY DEDICATED BY

THE AUTHOR.

"From scenes like these old Scotia's grandeur springs,
That makes her loved at home, revered abroad:
Princes and lords are but the breath of kings,
'An honest man's the noblest work of God.'"

BURNS.

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PREFACE TO SECOND EDITION.

The First Edition of this Publication having met with such marked public favour, that the whole of the Copies were disposed of in a few weeks on the West Coast of New Zealand; and several large orders from booksellers in other parts of the Colony having since been received, this Second Edition is published with improved lithographic views of West Coast scenery.

The author begs most cordially to thank the leading Colonial Journals who have reviewed the work, including *The Melbourne Argus, Sydney Morning Herald, Hobart Mercury, Otago Daily Times, Dunedin Herald, Auckland Herald, Westport Times,* and others, for their extremely favourable criticisms.

INTRODUCTION.

The Nineteenth Century is an Age of Travel. Every accessible point of interest and coigne of vantage on the universal globe is becoming, year by year, a scene of pilgrimage for increasing bands of tourists. Journeyings and wanderings to and fro, which, to the past generation, would have seemed daring deeds and "enterprises of great pith and moment," are in these days of progression deemed but ordinary occurrences. Given but the means, the way is clear to the tourist, even to the "nethermost parts of the earth." New Zealand, the Britain of the South, admittedly presents a diversity of scenery, unsurpassed in its variety, magnificence, and grandeur, by any other part of the world. It is, in sooth, a land of picturesque wonders, wherein the admirer of the sublime may "look from Nature up to Nature's God" in never-ceasing awe and admiration. Foremost in its wide and long continuing stretch of panoramic beauty, forest and glade, and hill and dale, mountains overtopping mountains, "Ossa piled upon Pilion," woodland, lakes, wide brimming rivers, and deep-sea sounds, cleaving their way into wild solitudes —offspring of the mighty Pacific wooing in their homes the Sylvan deities—stands the West Coast of the South Island.

Time was, and not so long since, when its solitudes were untrodden by European footsteps. The mariner, scudding along the coast, viewed from afar off the stupendous mountain system rising, apparently, from the very bosom of the sea, and cared not for closer vicinage, save when driven by stress of wind or tempest, of which few save himself knew the extent and beauty. Gold, the all-potent agency of civilisation, at last lured hither expectant and self-reliant thousands, the waste places were inhabited, towns sprang up as if by magic, migration from all parts of the Australasian Colonies came henceward, and settlement on the West Coast became a mighty factor in the work of colonisation. Improved steamboat communication, and increased facilities for inland travel, now offer inducements, which tourists are beginning to understand and appreciate. Every succeeding summer witnesses an increase of visitors, who go away, at once delighted and amazed, to spread in widening circles their tales of this wonderland. It would be no extravagant prediction to assert that in a few years hence the West Coast will become a recognised stage in the grand tour, which to miss will be to mar all pleasurable recollections.

Already the need has arisen for a work of this kind, which is intended partly as a *vade mecum*, to direct travellers on pleasure bent, what to seek and what to avoid, how to order their goings to and fro, and how to attain the maximum of pleasure, at a minimum

of expense and exertion; and partly as a descriptive history, with illustrations, of the West Coast of New Zealand. Such is the intent, in unpretentious form, of the present volume.

The Sounds of the West Coast of Otago first call for reference, and in the description we shall introduce to our readers, we shall endeavour to fulfil a twofold object. First to place at their disposal one of the earliest of the many descriptions, published in fugitive form, of the West Coast Sounds; and secondly, to keep the memory green of a journalist who, ranking high in his profession, was identified with the earliest history of the coast, was well esteemed by all who knew him—and they were many—and whose untimely end was a source of profound regret. We refer to the late ALEXANDER REID, formerly editor of the *West Coast Times*.

A journalist's repute is at the best but evanescent. Writing but of the passing topics of the hour, each day brings its new duty, wiping off the record of the day that is past. His abiding influence is felt rather than seen, he moulds public opinion even while he expresses its passing phases, he chronicles the story of our lives from day to day, but unlike the historian who hands down his laborious tomes as heirlooms to posterity, the journalist gains but ephemeral fame. Like the "poor player," he "struts his brief hour," and then passes out of the land of shadows, not unwept, but oft "unhonoured and unsung."

The other chapters are mostly descriptive of occasional rides and rambles in various parts of this new "land of the mountain and the flood,"—the Golden Coast of New Zealand—a spot of beauty, full of goodly prospect.

R. C. R.

HOKITIKA, N.Z.,
1st August 1884.

THE GOLDEN COAST.

ITS EARLIEST DAYS—BEFORE THE GOLD.

CHAPTER I.

THE first mention made of the West Coast of the Middle Island of New Zealand was early in the year 1770; when Captain Cook, after reaching the North Island of New Zealand, where he first cast anchor in the Bay of Tauranga on the 8th of October 1769, subsequently followed down the eastern coasts of the Northern and Southern Islands. Without discovering the channel by which the islands are separated, he is reported to have turned the South Cape, and traced the western shores back to Cook Strait, giving his own name to the great mountain visible on the West Coast, and giving the name of Cape Farewell to the north-west extremity of the Middle Island, from whence he took his departure for England on the 31st March 1770. Between 1769 and 1777, Cook visited New Zealand five times. From the time of Cook's visits, for nearly a hundred years, the history of the West Coast was a blank. It was occupied during that time, as far as can be ascertained, by a limited number of Maoris. In a compendium of official documents relative to Native affairs in the South Island, compiled in 1873 by Mr Alexander Mackay, Native Commissioner, much valuable information has been furnished respecting the doings of the Natives in this part of the country, long before white men trod the soil. From this compilation principally, and from scraps of information given me by the Native Chief Tainui,—or who is better known in recent political history as Ihaia Tainui, late member of the General Assembly for the Southern Maori District,—in leisure moments in the Assembly Library during the Sessions of 1879 and 1880, I am enabled to give a few jottings of what the Coast was before the golden days. The difficulty of obtaining, from any Native in New Zealand, information about the ancestors of other than his own family, has often been remarked, but as Mr Mackay has noted, the account which the members of a tribe are able to give of the early wanderings of their ancestors and of their wars with other tribes, subsequent to their first settlement in New Zealand, is generally fairly within the limits of probability, and may be considered to rest on authority equally worthy of credit as much of the early histories of European

nations. The first few Maoris, who are reported in Native traditions to have reached the Middle Island, were the crew of the canoe, Takitumu, or, as it was sometimes called for its fast sailing, Horouta, but there appears to be little or no record of what became of them. A branch of the Ngaitahu from Wanganui, under a chief named Tauirapareko, were the next to cross over from the North Island, a section of whom called Ngatiwairangi, with their chief Twahirikakahu, settled at Arahura, on the West Coast. Next in point of time was a tribe named Pohea, also from Wanganui, who settled at Wakatu, in the neighbourhood of Nelson. The tribe Ngatitumata Kokiri were the next to arrive and spread themselves in small numbers along the coast from Nelson as far as the river Karamea. At a later period, when fighting was going on in the North Island, a division of the Ngaitahu proceeded to Arahura for the purpose of finding some greenstone (pounamu) which was reported to have been discovered there. According to Native tradition, a Chief named Ngahue was the first to discover the greenstone. This Chief, it is said, was driven from Hawaiki, through the jealousy of a woman, and took up his abode at Arahura. When there, he found a block of the greenstone and took it back with him to Hawaiki, where some of his people made axes of the greenstone and constructed two canoes, Te Arawa and Tainui, with which these people came to New Zealand. It is supposed also by the Maoris that a small piece of the same stone was fashioned into an ear-ring and brought back by the crews of Te Arawa and Tainui, the ancestors of Tgatitoa, from whom it has descended as an heirloom through several generations. This ornament was called Kaitangata, and was presented to Sir George Grey in 1853, on the occasion of his departure for England, by Te Rangihaeata, the principal Chief of that tribe, as an assurance of their regard and esteem. A piece of the greenstone is also said to have been taken to Kaiapoi, where the Ngaitahu were much struck with its beauty, and eagerly inquired where it was procured. On being told its locality it was agreed that three of the Ngaitahu should accompany the Ngatiwairenga back to Arahura, where the stone was said to exist in large quantities. The cupidity of the Ngaitahu being excited with the intelligence, a large body of them travelled across the Island to the West Coast, where they speedily overcame the Ngatiwairenga, most of whom were killed, with the exception of a few women and children, who were spared by and embodied into the Ngaitahu tribe. After these events a portion of the Ngaitahu, designated the Pontiui Ngaitahu, to distinguish them from the East Coast branch, settled on the West Coast, where their descendants have ever since resided. The Ngaitahu were not allowed to remain on the West Coast in perfect peace, for they were frequently attacked by other tribes, but they managed to hold their own. The causes of dispute were as to the right of catching weka, kiwi, and kakapo, in the Arahura, Hokitika, Upper Grey, and Buller districts, but their numbers being limited no very serious fights took place between them. The Ngaitahu appear to have been located in various parts of the West Coast for considerably more than a century. One or two serious engagements are reported as having taken place in the northern parts of the coast, and large numbers of the attacking parties were killed, on one occasion at Karamea and

once on the Paparolia range, dividing the valleys of the Grey and Buller. At one time Niho and Takarei, with their followers, proceeded down the West Coast as far as the Hokitika River, conquering all the country before them. These two Chiefs, with some of the Ngatitoa, for a considerable time settled down at Mawhera (Greymouth). Finally fearing attack from other tribes, they returned to Massacre Bay with the remnant of their party, and never resumed possession of the West Coast further south than Kaurangi Point, beyond West Wanganui.

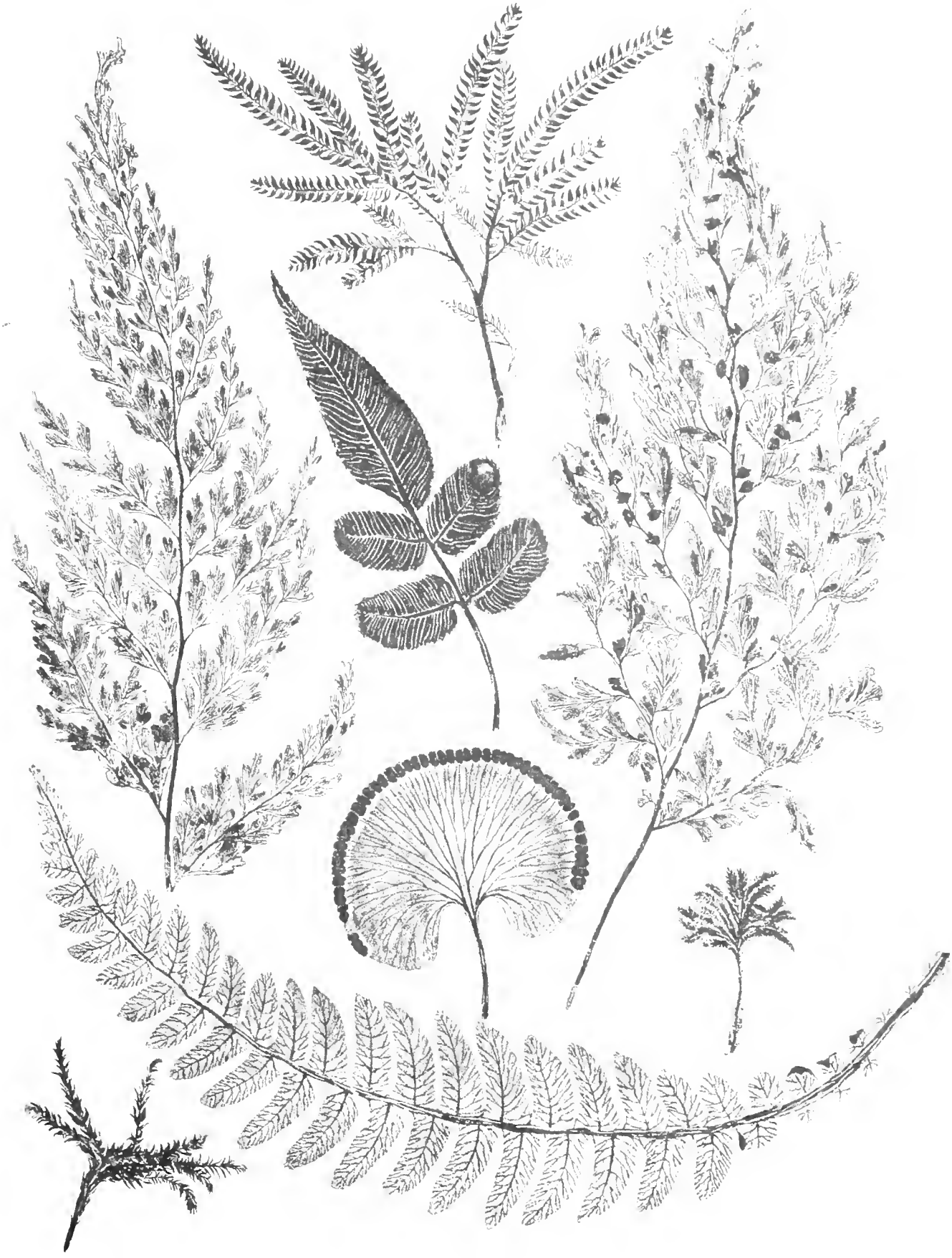
These cruel and worse than useless conflicts between the Natives appear to have died out after 1834-35, when Mission stations were formed at Otaki, Wanganui, and other places adjacent to Cook Strait. The Missionary influence soon extended itself to the West Coast, and the Natives here, as elsewhere, turned their attention to more peaceful pursuits. For some time after this, and as late as 1850-51, the existence of a wild tribe was reported at Bligh Sound. The following information, concerning the Ngatimamoe, is copied from the New Zealand Pilot, from notes made by Captain Stokes, of H.M.S. Acheron, while engaged surveying the West Coast of the Middle Island in the years above mentioned:—"The Acheron's party, while examining a river at the head of Bligh Sound, came on the fresh footmarks of some natives who were heard making their escape through the thick underwood; these people, as far as could be learned, belonged to a small isolated and almost unknown tribe, rarely seen even by their own countrymen, by whom they were called wild men of the mountains." This discovery, Mr Mackay tells us, led to the revival of the old idea respecting an aboriginal race, but there is no room for speculation, he says, as to the origin of those people, as the Natives of the South described them as belonging to a tribe called Ngatimamoe, formerly one of the most numerous of the aboriginal tribes inhabiting the Middle Island, but from the incessant wars waged against them by the Ngaitahu, they had become so reduced in number, that the remnant had withdrawn to the mountains, west of Lakes Hawea and Wanaka, from which they could not be driven. It is also stated that smoke from the fires of this wild tribe had often been seen by the Natives living north of Milford Haven. And Mr Mackay also remarks that "it seems clear, from the various statements received concerning the existence of the Ngatimamoe on the West Coast, that a number of these fugitives did occupy the mountainous country in the south-west district of Otago, to a comparatively recent date. The exploration, however, to which the country has been subjected during the last few years by parties of diggers prospecting for gold, forbids any reasonable hope that any of this tribe still exist."

In August 1853, Sir George Grey, who was then Governor of the Colony, determined to conclude the purchase from the Natives, subject to certain reservations, of their interest in all the lands held by them on the northern and western portions of the Middle Island. Assisted by Commissioner M'Lean he entered into arrangements with this object. Just as these arrangements were initiated, Sir George Grey left for England, and Mr M'Lean subsequently carried them into effect. In November 1854, Mr Brunner, Government surveyor, and Mr Jenkins, Native interpreter at Nelson, were despatched to

mark off the boundaries of such reserves as would be required for the resident natives. This was found to be a more difficult task than was at first imagined, owing to the jealousy evinced on the part of some of the Natives. After repeated interruptions a final settlement was effected in March 1856. The terms of the agreement were the payment of £5000 and a large number of reserves, but before the purchase was concluded the amount was increased by £2000. The documents in connection with this purchase were comprised in thirteen deeds, and the negotiation was one of great difficulty. This purchase did not include all the Native lands in the Middle Island. One or two claims had still to be settled. Amongst these was the purchase of the Arahura district, on the West Coast, which was left to be concluded by Mr James Mackay (junior). It was ultimately settled in May 1860 by a payment of £300 and a reserve of 10,224 acres, of which 6724 were set apart for individual occupation, and 3500 to produce a fund for eleemosynary purposes in connection with the Natives, under the provisions of "The Native Reserves Act, 1856." Other lands in the same district have since been brought under the aforesaid Act, some of which have become very valuable in consequence of the discovery of gold on the West Coast in 1865, which caused a demand for land for building and agricultural occupation, and the Native Trust is now deriving an annual revenue of between £3000 and £4000, from land that less than twenty years ago was but a useless wilderness.

In concluding this brief and necessarily incomplete chapter on the earliest days of this Coast, I may note the great changes which have taken place in the condition of the Native race now resident in these districts. The Maori population, at the present time, on the West Coast number only between fifty and sixty.

As a rule they are all comfortably settled on their reserves. At the Arahura they have established a settlement, with a school, where the Native children are taught the rudiments of the English language. Many of them have provided themselves with horses, drays, and buggies, and have well built and equally well furnished houses. They are quiet, sober, and peaceable, though apathetic and improvident, apparently caring for nothing beyond the present.



SPECIMENS OF WEST COAST FERNS

EARLY EXPLORERS.

CHAPTER II.

HAVING related a few circumstances respecting the earliest days of the Coast, before its lands were trodden by any white man, we purpose here devoting a chapter to some of the earliest explorers, of whose plucky adventures, and of the hardships they endured in the primitive days of the Coast, but little has as yet been published.

The country commencing at Jacob's River on the south, and extending to Milford Haven on the north, was first visited and explored by whalers and sealers from Otago Bluff and Jacob's River. Amongst these Reid stands prominent, and Howell has also been mentioned. The country between Milford Sound and Cape Foulwind does not appear to have been visited by these early voyagers. From Cape Foulwind to Cape Farewell, the sealing parties under Green and Toms in 1836 visited several places, and were for some time living on the Steeples or Black Reefs near Westport, where they killed several seals. Toms was on one occasion caught and thrown down by a very large seal, which bit him most severely on the thigh. He escaped death by killing it with a few hard blows from his fist on the nose.

After the advent of the New Zealand Company, Messrs Heaphy (the late Major Heaphy, V.C.) and the late Thomas Brunner, two of the Company's surveyors in 1845, visited the West Coast, and travelled along it on foot from West Wanganui, near Cape Farewell, to the Grey River. At West Wanganui an old cannibal chief named Niho refused to allow them to proceed down the Coast, unless he received payment for trespass on a country hitherto unexplored by Europeans. They had nothing with which to meet his demand, but they managed to decoy him across the harbour in a canoe, where they left him alone on the beach bewailing his fate and cursing the perfidious Pakehas. They suffered severe privation, having to live on the natural productions of the country. On their return to Nelson they reported unfavourably of the West Coast districts as a field for settlement, and pronounced the rivers as not being fit for coasting vessels to enter. Subsequently Messrs Heaphy, Brunner, and Fox (now Sir William Fox, K.C.M.G., and at that time agent for the New Zealand Company at Nelson) made some trips to the head waters of the river Buller, and the country adjacent to the lakes Rotoiti and Rotorua, and river Tiramuea or Marylea. On one of these trips Mr Fox in crossing a river was washed off his feet, but managed to swim ashore with much difficulty, having been burdened with a swag.

Mr Thomas Brunner shortly after took in hand one of the most difficult tasks which any New Zealand explorer ever essayed to accomplish. He started from Foxhill, Nelson,

with two Natives; and after innumerable adventures and privations, he managed to successfully follow the mighty river Buller from its source to the sea. So short were the necessaries of life, that they were on one occasion compelled to eat Mr Brunner's favourite dog, from which incident he obtained from the Maoris the soubriquet of "Kai Kuoi" (dog eater). The traveller who now jogs comfortably along on his horse down the banks of the Buller, from the Rotoiti plains to Westport, no doubt thinks this was not much of an expedition, Brunner having only to travel over two hundred miles; but he fails to remember that the explorer might be for weeks delayed between branch rivers by floods, and that the howling black birch forest, with its innumerable spurs and gullies, is not easy to travel through, when the explorer is half starved, and when, in addition, the country through which he is passing affords but little in the shape of vegetable production or living thing of any description. And be it remembered, the forest was then in its primeval condition, with only a few Maori tracks. There are only two edible ferns, the Mamakau and Katote. The first is only found in country where the soil is of fair quality, but not in black birch forests. The root of this fern when cooked in a Maori oven is considered very good, and will sustain life well especially if an eel can be added to the banquet. The Katote fern is very bitter, and is found in the black birch forests, but is never eaten except in the last extremity. The nikau or cabbage palm is not found in the West Coast districts except in the immediate vicinity of the sea. But to return to Mr Brunner. He next proceeded from the Buller mouth along the Coast to the Grey, and thence travelled south to the Waiho River, which he was unable to cross owing to its being flooded. He then retraced his steps to the Grey. Thence he travelled up the Grey River, on his way discovering the Brunner coal seam. Passing the Mawheraiti junction, he proceeded over the saddle to the river Inangahua, and journeyed on to Buller River, passing through the Rotoiti plain, and thence to Nelson, from which place he had been absent for eighteen months. There he received the congratulations of his numerous friends, who had, from his long absence and want of communication, given him and his two Maori companions up as lost. In acknowledgment of these and other services, Mr Brunner received the medal of the Royal Geographical Society. For many years after this he filled the responsible position of chief surveyor for the Province of Nelson. He died at the comparatively early age of fifty years, his friends believing that his death was hastened by the hardships he had endured in his exploring expeditions.

Mr Charles Heaphy, after a long career of service under the New Zealand Company and in various official capacities at Nelson, was removed to the North Island, and as a Major of the New Zealand Militia served through the Waikato campaign. The indomitable pluck and courage which carried him through the difficulties and hardships on the West Coast enabled him to win the Victoria Cross. For many years before his death the gallant Major was to be seen walking along bent with rheumatism, the result of the hard life and rough exposure he endured in the surveys and explorations in the early days of the Colony.

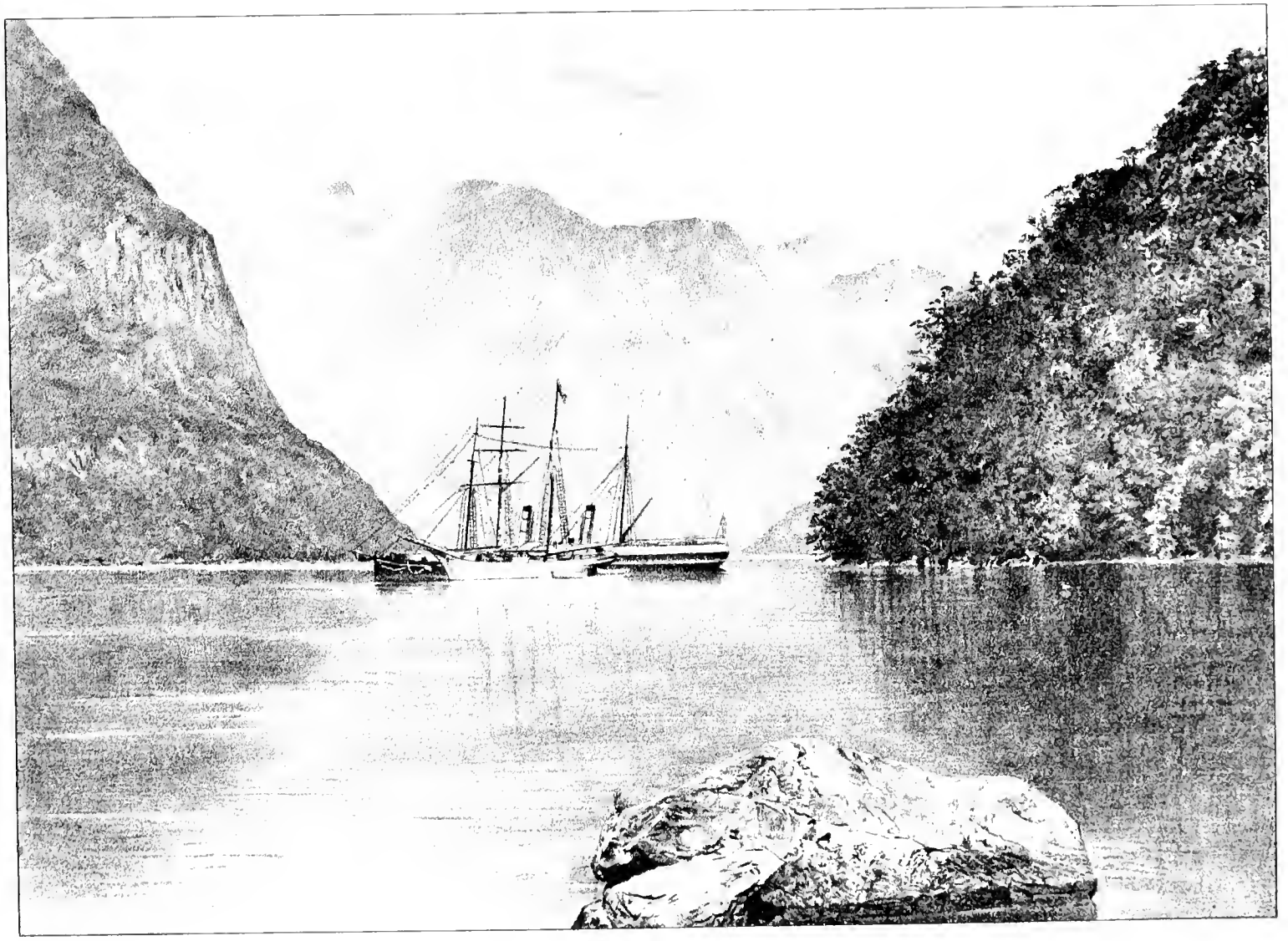
Next on the list of early West Coast explorers comes Mr James Mackay. He arrived at Nelson early in 1845, and being then in his fourteenth year, took readily to bush travel-

ling and colonial hard work. In 1855, he, in company with the late Mr John Clarke of Pakawau, explored the whole of the mountainous country lying between the head waters of the Aorere, Heaphy (Wakapoai), Mackay (Karamea), and Anatoki rivers, also a portion of the country between the sources of the Pakaka and Karamea rivers. He furnished the Provincial Council of Nelson with an account of the explorations and a sketch map of the country. Early in January 1857, Mr Mackay, accompanied by two Massacre Bay Maoris, travelled by the sea coast on foot, from West Wanganui to the river Buller. Their object was to see some grass plains which the Natives reported existed there, and which Mr Mackay proposed to stock from his run at Massacre Bay, if the country was found suitable. On arriving at the Buller, he was much struck with the appearance of the mouth of the river, and as the bar was perfectly smooth and the weather calm, he proceeded out in a canoe, and sounded the channel, which he found to be navigable for coasting craft of considerable draught. After this they went to the Kara-o-tamatea plains, now known as Waite's Pakihis, and the party travelled inland to Ngawaitakere now known as Charleston; thence they took to the Coast, and on reaching the Miko cliffs (Jacob's ladder) near Cape Rumney, they found the ladders used by the Maoris so decayed that they had to replace them with new timber. Having ascended themselves, and hoisted up their swags and dog, they were astonished on reaching the summit to hear voices of Maoris exclaiming "He Kuri Pakihi" (a dog of European breed). The dog having run on ahead, a rush was at once made by the Maoris into the bush, and it was some time before the astonished Natives could be led to believe that they were safe to approach the exploring party. The Natives were so overjoyed at seeing a European, none having been there since Mr Brunner's visit in 1847, that they agreed to defer their trip to the Buller and to accompany Mr Mackay instead, all the way to the Grey. On reaching the Grey, Mr Mackay made arrangements with the Natives to take him up the river in a canoe, as far as Ahaura, for a payment of ten pounds. On getting there they incited Mackay's two Native companions to refuse to go any further with him, and said he should not proceed by himself unless he paid a sum of fifty pounds, to be divided among all present. Threats were used and personal violence was attempted. Mackay met this by throwing one Maori into the river, and knocking another down in the canoe. Affairs were waxing warm, when the head chief (Tarapuhi) came on the scene, and restored order, volunteering to act as guide himself. Mr Mackay then explored the grass and open country at Ahaura, Totara Flat, and Mawheraita (Little Grey). After this the whole party returned to the mouth of the Grey, where they sounded the bar in a canoe, and found that the river was navigable for small craft. He then returned to Massacre Bay by the Coast. An account of this trip was published in the Nelson *Examiner*, where attention was drawn to the fact that the Buller and Grey rivers would admit coasting vessels of light draught to enter. It may be here mentioned that Mr Mackay, on this occasion, carried in his swag the first sample of Grey coal ever exhibited to public notice.

The Collingwood goldfield had then become a source of attraction, and as there were numerous disputes between the European and Maori miners (the latter had come there

in numbers from both sides of the Cook Strait), Mr Mackay, from his knowledge of Maori, was constantly appealed to to settle them. This resulted in his being appointed, in February 1858, to be Assistant Native Secretary, and subsequently becoming Resident Magistrate and Warden of the Collingwood goldfield.

Under instructions from the Native Secretary and Chief Land Purchase Commissioner (Mr Donald M'Lean), Mr James Mackay proceeded to the East Coast of the Middle Island in January 1859 to make a final payment for the lands in the Province of Nelson (since Marlborough), commencing at Cape Campbell and extending to the river Hurunui. Mr James Mackay was accompanied by his cousin Alexander Mackay (now Native Commissioner for Middle Island). After completing this purchase, known as the Kaikoura purchase, the two Mackays proceeded to Christchurch, which they reached in April of that year. Here Mr James Mackay received further instructions to proceed to the West Coast and purchase the country from Kaurangi Point to Milford Haven from the resident Natives. Mr Alexander Mackay volunteered to accompany his cousin; they travelled by land, and on arriving at Lake Sumner found Mr John Rochfort, who had entered into a contract to survey the southern boundary of the Province of Nelson and to traverse the rivers Grey and Buller and some portion of the Coast line. Mr Rochfort had two survey labourers with him. At the end of April the party started to cross the saddle dividing the Hurunui and Teremakau rivers. They were doomed to be disappointed for about a week, as snow fell heavily, and they were confined to their camp. On the weather clearing, the party broke a road through the snow, and managed to reach clear ground on the Teremakau in time to camp for the night. The next day James Mackay took the lead. He and Rochfort were some distance ahead of the remainder of the party. They came to a bluff point which compelled them to cross the river. J. Mackay did not like the nearest ford, and fortunately as it turned out went to one a few yards lower down. Rochfort, however, preferred the upper one. On reaching the middle of the river he lost his footing on a slippery ledge of rock, and was rapidly carried down the stream, rolling over and over in the current, not being able to rise on account of his heavy swag from which he could not disencumber himself. Mackay heard the splash of Rochfort's fall, and seeing it would tax his strength to the utmost to attempt to stop his companion (the current being too strong to stand still in), immediately clutched a large boulder with his right hand and caught Rochfort with his left as he floated past. He succeeded in stopping him and getting his head above water, and held him until the rest of the party came up, when with their united strength he was dragged out of the river. This spoiled some of their scanty stock of provisions and matches. The party kept together until they reached the Otira stream, when Rochfort and his men went on with the survey, which they continued down the Teremakau to Pakihi, and thence by the Brunner Lake and river Arnold to the Grey. The cousins Mackay followed the Teremakau to the sea, and went thence to Mawhera (now Greymouth). Here Mr James Mackay entered into negotiations with the Natives for the sale of their lands. They agreed to take £200 for all their claim, but declined to sell all the block lying between



HARRISON'S COVE, MILFORD SOUND.

the Grey and Hokitika rivers from their mouths to their sources. As Mr Mackay's instructions did not permit the making so extensive a reserve, he determined to return to Nelson to communicate with the General Government and request further orders. Messrs Mackay and Rochfort had chartered the cutter "Supply," Captain John Walker, to bring them provisions to the Grey, but owing to bad weather she could not cross the bar of that river, and was compelled to land the supplies at the Buller (now Westport). It was of course utterly impossible to utilise the stores, the distance from the Grey and the impracticable nature of intervening country rendering it impossible to carry them from the Buller. Both parties had therefore the satisfaction of knowing for six months (May to October) that they had plenty of good food at the Buller; although for that period they saw neither flour, meat, tea, nor sugar, and had to live on a few potatoes when at the settlements, and at other times on the natural productions of the country. The cutter "Supply" was the first coasting vessel which entered the Buller River. At the end of August 1859, the Messrs Mackay, accompanied by one Native, proceeded up the valley of the Grey to the Alexander stream and to the Upper Inangahua with the view of proceeding by the Maruia plain and Upper Buller to Nelson. They, however, were forced to abandon the expedition from starvation and the inclement state of the weather, and returned in a most wretched plight to Greymouth. Thence the two Mackays travelled by coast to the Buller, where they found the cutter "Supply" had arrived on a second trip, and sailed in her to Nelson.

Mr James Mackay then went to Auckland, and the Governor, Colonel Gore Browne, instructed him to return to the West Coast, make ten thousand acres of reserves, and give the Natives £300 or £400 for the seven and a half millions of acres comprising that territory,—the Governor remarking that the country was of no use to the few scattered Natives (one hundred and ten in number all told); but it was his duty to make good reserves, which would, by the profitable occupation of the remainder of the land by Europeans, be of more ultimate value than the whole waste untenanted district then was.

Accordingly, early in February 1860, James and Alexander Mackay, Frank Flowers, and three Massacre Bay Natives left Nelson and proceeded to the Rotoiti plains, the intention being to find a practicable line of road available for a road *viâ* Upper Buller and Maruia to the Upper Grey at the point where Mackay's exploration ceased in August 1859. Having heard of the difficulties of Brunner's Devil's Grip (a very difficult and almost impenetrable piece of country), an attempt was made to find a better route by crossing the range between the lakes Rotorua and descending into the valley of the Tiramuea or Maryleo. Mr Julius Haast, who had been engaged to report on the geology of the south-west portion of the Province of Nelson, accompanied the explorers in this part of the expedition. Mr Alexander Mackay meanwhile was engaged in exploring a line through the Devil's Grip, and thence towards the mouth of the Maryleo River. They and their party then explored and marked a track running parallel with the Buller to the river Matakitaki and thence to the junction of the Maruia and Buller. Mr Haast

remained in the neighbourhood of the Maryleo until a fresh supply of provisions arrived for his party, and also to enable the explorers to mark a track for his guidance. Mackay's expedition blazed a track up the Maruia Valley through the bush to the Maruia grass plains. They were now almost destitute of provisions, the supplies of native birds and edible vegetables were very scanty, and in order to eke out the remnant in hand, Alexander Mackay and Frank Flowers reluctantly returned to Nelson, leaving James Mackay and the three Natives to continue the exploration and connect by blazed track the Maruia plain with the Upper Grey Valley. The party progressed but slowly, being half starved, and Mr James Mackay having a bad gathered knee caused by being stabbed with spear grass on the Maruia plain. The Maoris became so tired and disheartened that they refused to proceed further, said they were in unknown country probably inhabited by wild men of the woods or enormous lizards, and they had better return to Nelson, or make up their minds to sit down quietly and die in the camp. James Mackay had, however, caught sight of a distant hill, which he recognised as one he had ascended in the Upper Grey in 1859, and he told them they would be in the Grey in two days. He cut and slashed his knee with a razor so as to ease the swelling and enable them to move quicker, and they succeeded in reaching the Grey. They marked the track the whole way from the Maruia plain to the junction of the Brown and Upper Grey Rivers. They shortly after this arrived in country where wood hens and fern root were plentiful, and again enjoyed a full meal. The time occupied in this journey was seven weeks, two of which period were passed in a state of semi-starvation. On reaching the Mawhera (now Greymouth) Native Settlement they found seven Collingwood Natives, and Mr Samuel M. Mackley who had travelled by the coast from West Wanganui, anxiously awaiting their arrival. Mr Mackay's gathered knee became very bad, and Mr Mackley, having been originally educated to the medical profession, and having a few useful drugs, etc., with him, managed with great care and attention to make it fit for travelling again in the course of three weeks. At this time Mr Haast and his party arrived, after suffering considerable hardships. The schooner "Gipsy," Captain Charles M'Cann, which had been chartered by the Nelson Provincial Government to bring supplies for Mr Haast's party, entered the Grey River. She brought Mr Mackay a private stock for himself and party. The "Gipsy" thus proved the fact of the Grey being available for coastal traffic, the same as the cutter "Supply" had proved the Buller to be. Messrs Mackay and Mackley, accompanied by all the Native residents of the Grey, Teremakau, Arahura, and Hokitika settlements, travelled then by the sea coast to the native settlement at Poherua Lagoon (near Okarito). Here the negotiations for the land purchase were conducted, and it was arranged at the conclusion that Mr Mackay and the leading chiefs should proceed to Jackson's Bay and lay out the reserves from there to Poherua Lagoon, and then the whole party should return to the Grey, fixing the reserves between Poherua and the Grey as they proceeded northwards. On arriving at Mahitahi (now Bruce Bay) Messrs Mackay and Mackley were closely examined and interrogated by three very ancient aboriginal females who had never before seen any person of European race. Their coats were styled (whare-o-te-tinana) body houses, their waistcoats (pakitua) small body mats,

their trousers (whare kuwaha) thigh trousers, and Mackley's boots (parairai), Maori for flax sandals. (Mackay had no boots; he wore flax sandals.) Having completed the marking out of reserves northward to Poherua, the reserves from there to the Grey were next fixed on the ground. On the 21st May 1860, the sum of three hundred pounds (£300) was paid to the resident natives in full satisfaction of all their claims; and the 7,500,000 acres, comprising all the land from Kaurangi Point to Milford Haven on the south, and extending inland to the watershed range between the East and West Coast, finally passed into the hands of the Crown. (See Note, page 21.) On leaving the Grey the results of all this labour were nearly lost, as, in crossing the river from the settlement to the north side (now Cobden), the canoe, in which were Mr Mackay and six Natives, upset. Mr Mackay had the land purchase deeds, field books of reserve surveys, the sextant and prismatic compass, and £100 in gold in a leather despatch bag, but he managed to swim with them until he reached the upturned canoe, and finally landed in safety. The Government afterwards grumbled at the slovenly and dirty appearance of the deeds and papers, but probably had they been aware of the fact that these documents had paid an involuntary visit to the bottom of the Grey River, they would not have complained.

Messrs Mackay, Mackley, and the ten Collingwood Natives then went on their way up the coast towards West Wanganui. On reaching the Buller (now Westport) they found a party of twenty Europeans who had arrived in a vessel from Canterbury in search of gold. (Mr John Rochfort had found it during his survey.) They were dissatisfied with the prospects obtained, and wished to return to the civilised world again. Mr Mackay, having completed the fixing of the reserves at the Buller, agreed to pilot this party up the coast to Massacre Bay. With two or three exceptions in the shape of old bushmen, the Canterbury grass plain men were very bad travellers, and Mackay, fearing they would meet with some accident on the dangerous rocks and rugged precipitous points between the Wakapoai River (Heaphy) and Kaurangi Point, determined to strike overland from the mouth of the Heaphy River, crossing the saddle between it and the Aurere (Collingwood River). This journey was safely accomplished. Each man carried fifty pounds' weight of provisions on starting from the Buller, but it was found necessary to consume the loads of some weakly members first, in order to enable them to keep pace with the remainder of the party. Mackay, Mackley, Small, and one Native led the party, and carried their fifty pounds of provisions per man, besides blankets, etc., intact, from the Buller River to the saddle as a stand-by in case of need. On sighting Collingwood all hands were put on double rations. The Provincial Government of Nelson gave Mr James Mackay a bonus of £150 for defining the track from the Rotoiti plains *riâ* Maruia to the mouth of the river Grey, which enabled Mr Julius Haast (now Dr Von Haast) to travel through and report on the geology of the country.

At the end of 1860 James Mackay and Major John Lockett did a considerable amount of exploration between the head waters of the Takaka-Karamea (Mackay) and

Wangaro Rivers, and discovered Mount Lockett, Mount Peel, and the Diamond Lakes, although in the month of December they were caught in a snowstorm and had to retreat. The furthest point south attained in this expedition was in a straight line (if prolonged) with the general direction of the Waimea mud flat.

Mr James Mackay's last exploring expedition to the Coast was in 1862 in company with Messrs John and Arthur Knyvett, when they blazed a saddle track line from the Upper Aurere (Collingwood) to the mouth of the Heaphy River. On this occasion Mr Mackay left his companions at the river Karamea (Mackay) and marched from there to Westport in one day.

Mr Mackay paid some visits to Westport afterwards as Resident Magistrate and Warden, but finally left the West Coast in July 1863, on the outbreak of the war in Waikato. Since then he has done little in the exploring line. His services during the Waikato war were principally confined to getting rebels to surrender, taking possession of rebel arms and ammunition, capturing some Maoris for various offences, and subsequently opening the Thames goldfields to the general public. Mr Mackay, after an absence of twenty years from Greymouth, again held the office of Resident Magistrate and Warden for that district in 1880 and 1881.

Mr Alexander Mackay, who accompanied and assisted his cousin on two of his exploring expeditions, held the office of Native Commissioner until 1883, when he was appointed Judge of the Native Lands Court.

Mr Samuel Meggitt Mackley, who accompanied Mr James Mackay in 1860 along the coast south of the Grey, settled in 1861 at Waipuna plain in the Upper Grey district, where he took up a sheep and cattle station. He was the first European occupier of land in that district, and is now the holder of a valuable homestead and property, and is as comfortable in every respect as a good settler can be, and as he deserves to be, as the pioneer of the agricultural interest in that portion of the Colony.

Mr John Rochfort is by profession a Civil Engineer and Surveyor. His first colonial experience was gained on the Australian goldfields. He then came to Nelson with other members of his family, and settled at Rewaka. Mr Rochfort in 1859 entered into a contract with the Provincial Government of Nelson to perform certain surveys on the West Coast. In that year he accomplished a feat unparallelled in the history of surveying in this Colony, that is, he managed for many months to carry on his work in a dense forest country without stores and provisions, other than the indigenous natural productions of the district. In surveying the Buller River he had the misfortune to lose all his stores by the upsetting of a canoe, but nothing daunted by this accident, he successfully completed the duty he had undertaken. Mr Rochfort was the discoverer of the coal seams at Mount Rochfort, near Westport, and he also was the first to find gold in the Buller River bed, and on the West Coast. Mr Rochfort was for some time attached to the Canterbury Survey Department, but of late years he has been connected with the Survey and Engineer departments at Nelson.

Dr Julius Haast can hardly be looked on as a West Coast explorer, as he merely

followed Messrs Mackay and Rochfort's tracks, but he with his assistant, the late Mr James Burnett, land surveyor, contributed materially to our knowledge of the geological formation of the West Coast districts. Dr Haast has since resided at Christchurch, where he has rendered good service to the cause of science. He recently received a medal from the Royal Geological Society, London, in recognition of his Alpine explorations.

Messrs Waite and Martin were the first settlers at Westport in 1860; and immediately thereafter the Buller goldfields became an established fact. The Grey district was visited in 1863 by R. A. Sherrin, who found gold there, and it was occupied by miners shortly afterwards.

Messrs Lee, Dobson, Harper, Walker, and Hewitt of Canterbury, paid visits to the West Coast at various times between 1858 and 1863, but their explorations were of small extent, and not to be compared with the services rendered by Brunner, Heaphy, Mackay, and Rochfort.

NOTE.—Having had an opportunity of perusing the Deed of Purchase from the Natives of the 7,500,000 acres of land on the West Coast for the sum of £300, referred to in the foregoing chapter, I append a copy of the original document, which reads as follows:—

This Deed written on this 21st day of May, in the year of our Lord, 1860, is a full and final sale conveyance and surrender by us the Chiefs and people of the Tribe Ngaitahu, whose names are hereunto subscribed: And witnesseth that on behalf of ourselves, our relatives and descendants we have, by signing this Deed under the shining sun of this day, parted with and for ever transferred unto Victoria Queen of England, Her Heirs, the Kings and Queens who may succeed Her and Their Assigns for ever in consideration of the sum of three hundred pounds (£300) to us paid by James Mackay, junr. on behalf of the Queen Victoria (and we hereby acknowledge the receipt of the said moneys) all that piece of our Land situate in the Provinces of Nelson, Canterbury and Otago, and named Poutini, Arahaura, the boundaries whereof are set forth at the foot of this Deed and a plan of which Land is annexed thereto, with its trees, minerals, waters, rivers, lakes, streams and interests whatsoever thereon. To hold to Queen Victoria Her Heirs and Assigns as a lasting possession absolutely for ever and ever. And in testimony of our consent to all the conditions of this Deed we have hereunto subscribed our names and marks. And in testimony of the consent of the Queen of England on her part to all the conditions of this Deed the name of James Mackay, junr., Commissioner, is hereunto subscribed. These are the boundaries of the land commencing at the seaside at Piopiotai (Milford Haven), thence proceeding inland to the snowy mountains of Taumaro, thence to the mountains, Tioripatea, Haorangi (Mount Cook), Terao-o-Tama, thence to the saddle of the source of the river Teremakau, thence to Mount Wakarewa, thence following the range of mountains to the Lake Roteroa, thence to the source of the rivers Karamea and Wakapoai, thence by a straight line drawn in a southerly direction. The sea coast is the boundary of Piopiotai (Milford Haven) where the boundaries meet.

There are certain lands within this block reserved from sale, these are described in schedule A and B attached to this Deed.

(Signed) JAMES MACKAY, Assistant Native Secretary.

Then follow these signatures, the Maori names in each case signed with a mark, thus + Kinihi, Kerei, Kawiri Mokohuruhuru, Pako, Wiremu Parata, Puaha-te-Rangi, Taraphi-te-Kaukihi, Mere-te-Aowangi, Werita Tainui, Hakiaha Taona, Purua, Makarini Tohi, Arapata Horau, Rewai Kaihi. Witnesses to the payment and signatures—James Mackay, junr., Assistant Native Secretary, acting for Land Purchase Commissioner; Samuel M. Mackley, settler, Nelson; James Burnett, surveyor, Nelson; Tamati Pirimona, Collingwood; Hori-te-Kirama, Collingwood.

Received this 21st day of May, in the year of our Lord one thousand eight hundred and sixty, the sum of £300 sterling, being the £300 consideration money expressed in the above written Deed to be paid by James Mackay, junr., on behalf of Her Majesty the Queen to us.

Witnesses—James Mackay, junr., Assistant Native Secretary for Land Purchase Commissioner; Samuel M. Mackley, settler, Nelson; James Burnett, surveyor, Nelson; Tamati Pirimona, Native Chief, Collingwood; Hori-te-Kirama, Native Chief, Parapara, Collingwood,; Tarapuhi, Werita Tainui, Hakiaha Taona, Makirini Tohi, Arapata Horau, Kiwai, Kaihi, Kinihi-te-kau, Kerei, Kawiri Mokohuruhuru, Puaha-te-Rangi.

THE WEST COAST SOUNDS.

CHAPTER III.

MANY excellent descriptions of this part of the West Coast have been written by tourists, who of late years have made excursions round the South Island of New Zealand. Most of the writers have contented themselves with the publication of the account of their visit to the Sounds in passing form in one or other of the leading journals of the Colony. Others again, eminent in literature and distinguished in travel, who have made an acquaintance with most parts of the two Islands, have been unable, however much inclined, to do justice to these isolated spots, where communication is less frequent than to the more populated localities. Noted amongst the latter is the late Mr Anthony Trollope, who, in his writings of New Zealand, was enabled to speak of the West Coast Sounds only from hearsay. Not having had an opportunity of visiting the West Coast, he has published as an appendix to his work on this Colony, a short account of the voyage of Sir George Bowen, then Governor of the Colony, to the south-western Sounds by H.M.S. "Clio," in February 1871. Mr Trollope, however, appears to have heard much of these parts whilst travelling through the Otago Province, and referring to the Sounds he makes note that "this part of New Zealand is so little known, and is at the same time so remarkable for that wild landscape beauty which during the last fifty years Englishmen have gone over the world to find, that it may be well to let some English tourists know where they may discover new fields for picturesque travelling and Alpine climbing." Mr Trollope managed to get as far as Lake Wakatipu in Otago, but was unable, it being near mid-winter, to reach with convenience the sounds or the lakes either to the north-east or south-west of Northern Otago. The information he received that there were a series of sounds which resembled closely the Norway Fiords, that "they are very numerous, and are at present desolate, without inhabitants, and almost unknown," is a brief but truthful description, which holds good to the present day, and, to all appearances, will do so for many years to come. And he is equally correct in addressing himself to English readers when he says:—"Though these lakes and fiords are difficult to reach, and though New Zealand is very far from London, that very difficulty will to many enhance the charm, and from year to year the distance, as compared by time, will become less and less." What the English novelist thus safely ventured to predict is fast quickening into fact.

THE FIRST WEST COAST EXPEDITION.

Let me now ask the reader to step on board the steamer "Geelong," and accompany the first West Coast Expedition, which left Dunedin in 1867, the narrative of

which, here necessarily abridged, is given by the writer referred to in our introductory chapter, when acting in the capacity of special correspondent to the *Otago Daily Times*, during the editorship of Mr, now Sir, Julius Vogel.

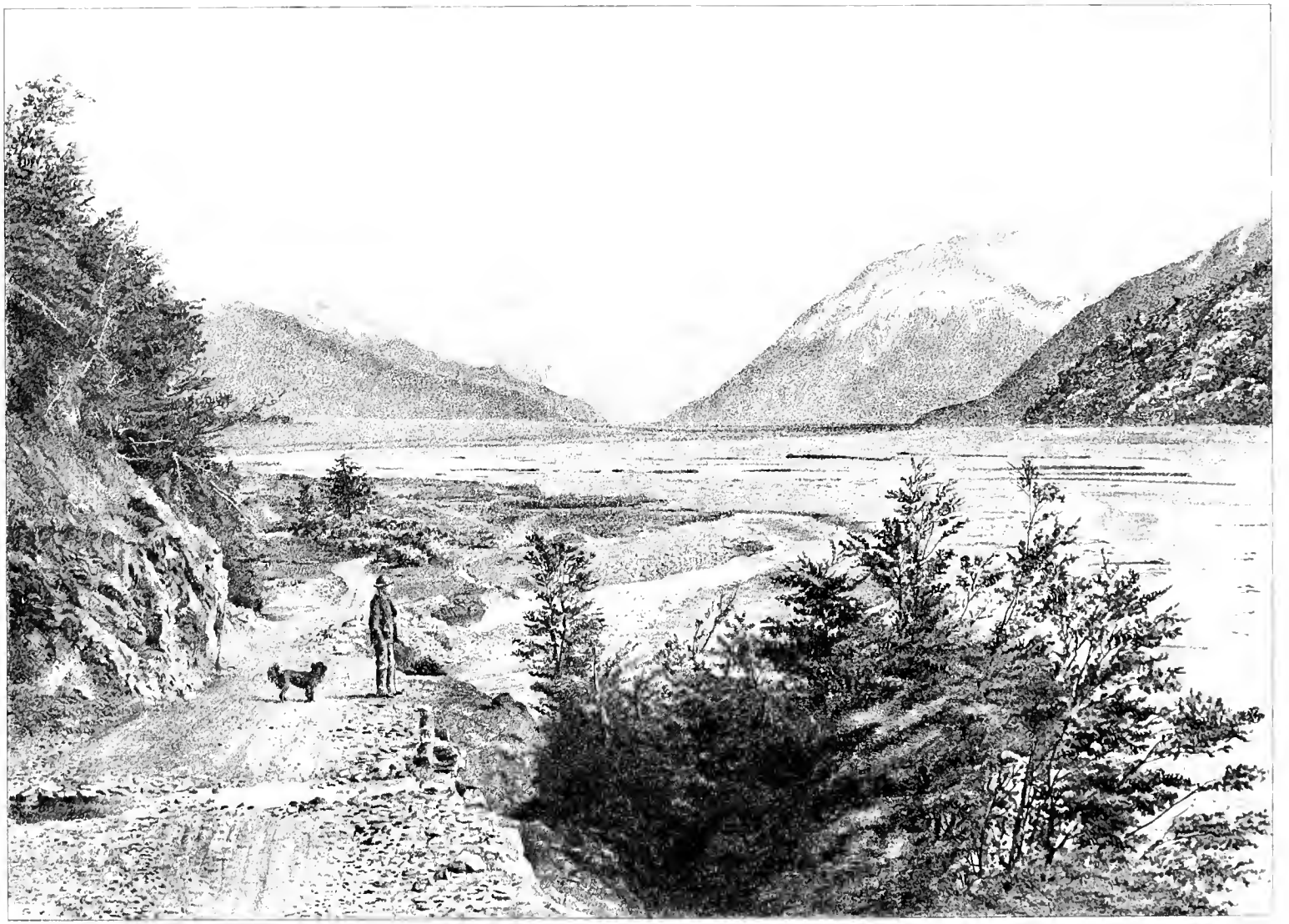
DUNEDIN TO PRESERVATION INLET.

The steamer "Geelong," commanded by Captain Thomas Hart, and under contract with the Provincial Government of Otago, sailed for the West Coast of that Province on the 5th of December 1867. She was advertised to proceed to Martin's Bay, and to call at the various inlets *en route*. Freely translated, this meant that she was to call at as many of the inlets which intersect the coast between Preservation Inlet and Milford Sound as it was possible for her to visit, with a due regard to the quantity of coal she could carry, and to the other circumstances which are not yet quite within human control. The voyage was not intended to be a trading one, although it was not destitute of the elements of business. It was only an exploring expedition—an expedition for the exploration of probably the most interesting and romantic portion of the whole Colony of New Zealand—and by no means the least considerable, though previously the least considered, part of the Otago Provincial Estate. It cannot receive special record as the first voyage of exploration to the West Coast; but there must be a mistake somewhere, if it does not prove to be not only not the last expedition of the kind, but the precursor of many more. Those who were passengers were chiefly official:—His Honour the Superintendent, Mr James Macandrew (subsequently Minister of Public Works for the Colony), the Secretary for Land and Works, Mr Duncan, a member of the Survey Department, Mr Wright, and the Harbourmaster, Captain Thomson, with one of his apprentice pilots, Mr Liddle. As cabin passengers there were other six gentlemen, of various tastes, and from different parts of the Province; and passages and provisions were given by the Provincial Government to eight or ten good practical miners, who, however, as it happened, had not much opportunity of proving their skill.

Familiar as the eastern coast may be, it was not destitute of objects of interest to those who were out in search of the picturesque, or of subjects for reflection for those who had a preference for the practical. As the sun rose, and took his breakfast by "eating up the wind," as our chief officer characterised the gradual reduction in the strength of the breeze, the magnificent valley of the Clutha was visible, with the Nuggets as the marked feature in the fore-ground, and in the dim distance the Tapanui Range. These were the elements of the picturesque. A practical question, which was not then suggested, but which might well be put, is—How long will it be before an equally eligible harbour, the Hollyford, in Martin's Bay, be adequately appreciated, if at this time of day, after twenty years of settlement, Port Molyneux—the port of one of the finest natural avenues of the country—can present, as its coast line landmarks, little more than the Government flagstaff, and—let it be added—the Alexandria Hotel, for it was really an object of prominence more than the population would seem to justify? There was one hopeful sign of industrial progress. Near Coal Point, there was a stout smoke

making its way actively to the clouds—a smoke which we judged to be from Mr Mansford's flax-mill. We were not near enough to hear the hoarse whistle of Captain Murray's steamer, but enough was seen before the end of the voyage to remind us of it, and to inspire a few with the hope—to be realised, of course, at no specific date, but, it may at least be said, before the end of the nineteenth century—that that whistle will not be the only one to be heard in connection with communication from coast to coast. Another smoke observable among the bush was that of the saw-mill at Catlin's River—a river which, six years ago, was as little known as is now the Hollyford, if not considerably less. By way of parenthesis, I may say that I use the name Hollyford, as applying to the river which flows out of Lake M'Kerrow, not from any preference, but because it is the name by which it is distinguished on the survey maps of the Province; but why Hollyford, and not Kaduku, which Dr Hector states to be the Maori name, it is difficult to conjecture. In deference to its European discoverer—Mr Alabaster, I think—the stream flowing into the M'Kerrow Lake might retain the name given to it, doubtfully appropriate as it is, but it is only a part of a whole—a contributor, among other contributors, to the Lake waters, of which the Kaduku is the outflow; and the Native name, it is said, is not only appropriately descriptive, but, unless the vulgar ear is at fault, not especially objectionable in the matter of sound. Of the neighbourhood of Catlin's River, one of the features is a peninsula of eccentric outline, and which is so much like an island—more so, of course, than a peninsula usually is—that it has received on the chart, as it apparently deserves, the name of False Islet. Another feature, historical more than topographical, is a real island to the southward. A prominent character in local history, we are told, made this isolated spot his occasional home. He was not a passive recluse, but apparently a very active misanthrope, for his name was Bloody Jack, and, for qualities which the expletive implies, his was a name which lived long in the memories of his race, and of the early European visitors to the coast. It is an island which is also recorded as a favourite landing-place with the Natives when they were more nomadic than they are now, and a locality to which they escaped when the Northern Natives came to do more than Cæsar—to see, to conquer, and to eat. A feature of the coast line south of Catlin's is White Point—more a line than a point of stratified rock, white enough certainly, but whether its whiteness is due to the natural colour of the same, or to a top-dressing of lichens, it was impossible, at our distance, to ascertain. From the next point southward—Long Point—the coast trends more to the west. There were only two other bits of this coast of which the note-takers among the party had a chance of making memoranda—Chasland's Mistake and Brother's Point. Chasland's Mistake has this little legend attached to it—that Mr Chasland (still living at Stewart's Island) was a coasting pilot, or acting as such, on board the survey vessel "Acheron;" that, one day, he said that there were seals to be found at this particular part of the coast; that the crew landed and found no seals; and, verily, they called that place Chasland's Mistake.

The surroundings of the Strait are not unknown, but it was not often that many of



BEALEY — WEST COAST ROAD

us had passed through under circumstances more favourable. For an hour or two, the breeze continued to blow well from the eastward, and, with the glare of the sun subdued by cumulus clouds, we had some pleasant, though distant, glimpses of Stewart's Island scenery to the southward, and of the peculiar variety of hill and lowland which are the characteristics of the northern shore. The numerous patches of foul ground lying off the coast, between New River and Jacob's River, were made visible by only a slight break on the rocks awash, and by the presence of some quaint-looking peaks in their midst. These dangers are chiefly to the eastward of Centre Island. This island is not of great height in any part, but it slopes from its summit gently to the north and east: and it is asserted that these islands in Foveaux Straits—Ruapuke, for instance—enjoy a better climate, and a more genial soil, than do some of the contiguous parts of the mainland. This, however, may be a delusion, not dissimilar to that of the good minister of an island parish of the West of Scotland, who besought a blessing "on the muckle Cumbrae and the little Cumbrae, and the adjacent islands of Great Britain and Ireland." As we passed Centre Island, the Raggedy Ranges of Stewart's Island opened to view—that portion of the island where gold has lately been discovered, and where some diggers are now at work. On our visit to the Bluff, on the return passage, we were assured that the discovery is a substantial one, and though the country is exceedingly inaccessible and rough, there appears to be a disposition on the part of Southland to turn it to profitable account. The reference, by the way, suggests a question—What are the exact relations between Southland and Stewart's Island; and are these relations—pardon the magniloquence—according to the Constitution? This part of Stewart's Island bears, in appearance, a close affinity to portions of the southern shore of Cook Strait, and it is evident that the ridging of the coast is as much the result of the wasting influence of the great western waves as of the primitive formation of the land. Before we reached this point, the Solander rose above the horizon—at first, a mere finger point, but it soon came to be seen in its true proportions, I was going to say, as the grand solitary sentinel at the western entrance of the Strait; but unfortunately for the convenient use of a good phrase, there is another and a smaller Solander—what Hyperborean islanders call a "calf." The larger rock, geographers tell us, is 1100 ft. in height; and a Maori boatman whom we met told us that some of its distinguishing features, not visible to the voyager, are an abundance of grass, a large population of wood-hens, and a lake upon its elevated summit.

We continued steaming towards Windsor Point, keeping a course W. by N., and to say we did so, is to say all that we did, so far as the passengers are concerned, for we were rather distant from the shore to be much interested in its features; and the only objects near us were some huge patches of detached kelp, which rose and fell on the surface water as if instinct with life, and provided with that convenient vertebral construction which the real live sea-serpent is supposed to possess. Past Tewaewae Bay, we were sufficiently near the shore to be more interested, because there was something more to be seen in the thickly wooded slopes, in the deep ravines, and in the snow-capped

peaks to the westward of the Waian. Still we were scarcely near enough to be able to realise very thoroughly the character of the lower land, and that at a greater distance, and of greater height, was only at intervals visible, the clouds, as usual during the day, betaking themselves to the mountain tops, which are consequently most readily seen to perfection in the light of the moon, or by the rays of the morning sun. It was under the first of these conditions that I happened, three years ago, to make acquaintance with some of the grand sights in mountain scenery on the West Coast; and it must certainly be said, that if to be with "ladye fair," or in abbey ancient, by moonlight alone, be pleasure meet for a child poetic, the feeling with which he would be inspired by Pembroke Peak, or the great Mount Cook, would not lose by comparison. But it was with the practical, more than the picturesque, that we had to do on this occasion, and, as we coasted along, a stretch of flat land or the indications of a valley were of more interest, as pointing to future settlement, than crags or peaks, or "rocks that rise in giddy grandeur." Abreast of the Solander, the steamer made more towards the shore. Although, if anything, colder in its aspect, it intimately resembles, in all essential particulars, the portions of the West Coast in the neighbourhood of Hokitika and the Grey; the ranges at one point, where they flank Big River, approaching the seaboard a little more closely than they do in those parts. Only here and there, on the spurs of the hills, or at intervals on the terraces, are patches of grass, and these apparently not accessible. The rest is the sort of country which will remain undeveloped until population becomes more abundant by immigration, or until a race of woodmen are born and bred in the country, as have been the backwoodsmen of Newfoundland, the Canadas, and the United States; and, distant as the day may be, it can scarcely fail to come when such a class will be needed to fill the ship-building yards of this country, or the ships of others, with supplies of the raw material from the extensive forests of the West Coast.

By the time we reached Green Islets, the breeze had freshened from the S.E.; except upon the hill-tops inland, not a cloud was to be seen; and we looked both upon sea and land, in this usually inhospitable region, in, perhaps, their brightest aspect. It is said in the sailing directions, that there is invariably a heavy surf along this part of the coast, and its character can be well imagined, from the complete scarping which the sea has given to some terraces towards Windsor Point. If anywhere, it may be said that here, "upon the rocky strand, breaks the huge wave which at the Pole began." The verdure, notwithstanding, keeps its ground close to the water's edge, a green stripe skirting the darker scrub, which covers the ridgy and broken ground beyond.

This Windsor Point may be considered the most south-westerly point of the Middle Island, and when we rounded it, we estimated ourselves to be on the West Coast, and that the interest of the expedition had commenced. Puseygnr Point, which marks the entrance of the southern arm of Preservation Inlet, being but three miles distant, was soon passed, and from the time of passing it until the completion of the trip northwards, there was a perceptible increase of interest in the objects to be seen, and in

the work to be done; and I venture to say that every one connected with the expedition found that, brief as was the time it occupied, it involved considerably more work than play.

PRESERVATION INLET.

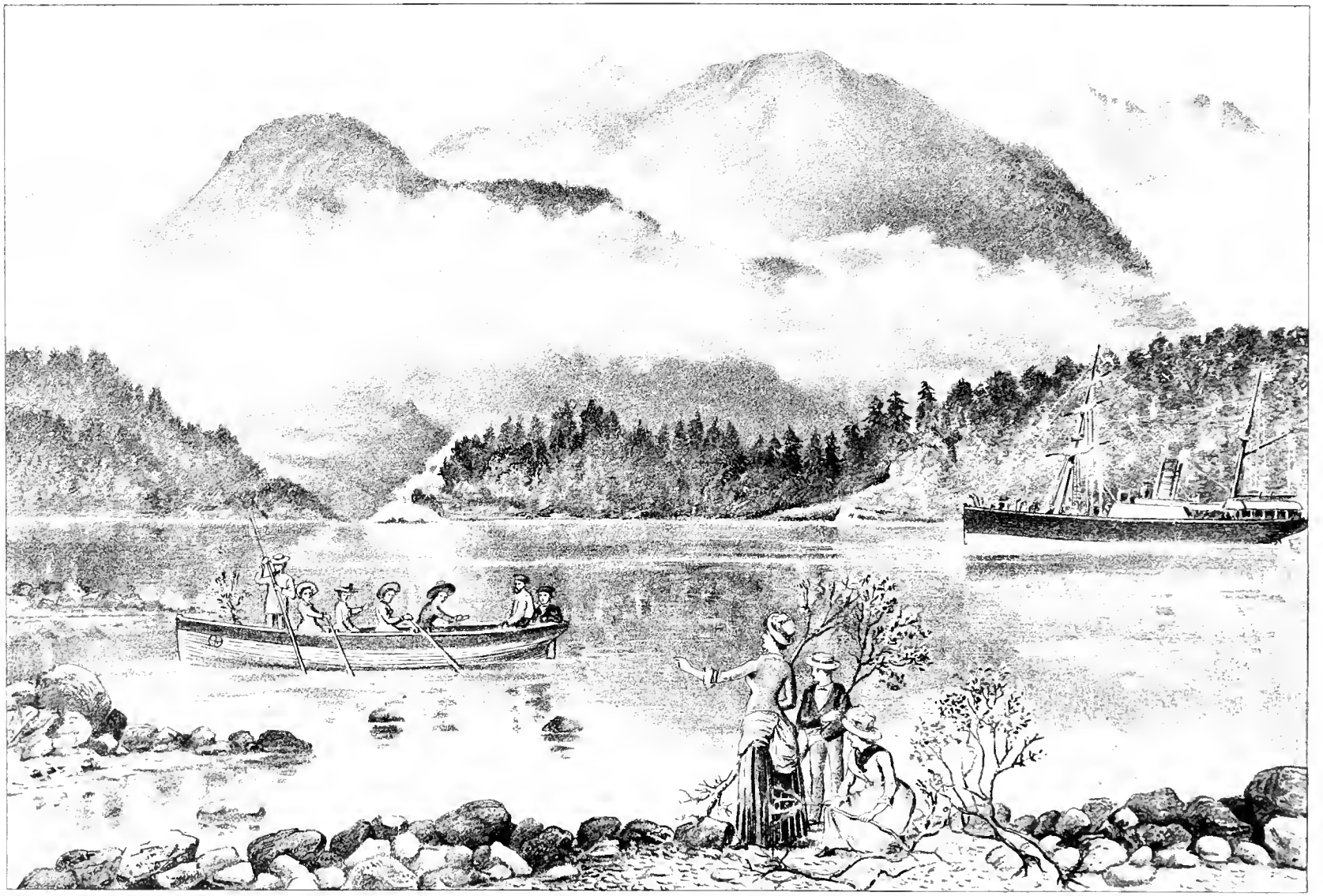
In resuming the discursive narrative of what was done and seen by the West Coast expedition, let me premise that the mere configuration of the country, and its geological structure, are the subjects to which, probably, the least reference will be made. These are matters in relation to which any visitor to the West Coast, ambitious of excelling in descriptive, will find himself to be anticipated both in point of time and skill. The "New Zealand Pilot" is an unpretending digest of sailing directions; but its merits exceed its pretensions. It is a comprehensive description of the coast-line, tersely written; and it is not destitute of elements of the graphic. The Provincial archives also contain—it may rather be said, conceal—Dr Hector's exhaustive account of his observations of the geology of such parts of the coast as he had visited. I say conceal, because that is really almost all that is achieved by printing, in such unpopular form as that of a Provincial Gazette, information which should be as accessible to everybody as one of Johnston's maps or Murray's guides.

All that I can venture to do is to put into something like shape a heap of *disjecta membra*—the fragmentary entries of a note-book as to each day's proceedings—most of them personal, a few of them touching on the picturesque, and as many as possible aiming at the practical.

About six o'clock on Saturday evening, December 6th, we got as far as Puseygur Point, the southern limit of Preservation Inlet. Almost before we passed it, for it is a low sloping promontory, we had a view of the southern arm of the Inlet, known as Otago's Retreat, not from any reference to the political state of the Province, but because, at the time of the survey, a schooner of that name attached to the service found it a convenient shelter in an hour of peculiar need. Through this vista we had the first glimpse of the scenery with which in a few days we became—I dare not say wearied, for that would be irreverent, but I may say, figuratively—and as far as the figure can go—overwhelmed. The sun was reaching the horizon, and its evening light enhanced the comparative liveliness of the foreground, for, even here, the vegetation partakes of the characteristic richness of the northern parts of the West Coast, and the cliffs present a picture with which nothing on the East Coast can compare. The ornamental shrubbery—including veronicas, olearias, and others, the mere names of which, however elegantly strung together, would convey little information—are especially beautiful, and are a distinguishing feature of the scenery of all this coast-line. Behind the long stretch of deep green foliage rose big brown hills, darkened by the shade of others intervening between them and the setting sun; and behind them again were the snow-clad summits of such hills as Solitary and Forgotten Peaks, standing close on 4000 feet high. I find that, at this point, I have left three blank pages in my note-book—no doubt with the

laudable ambition of filling in a sketch of the phantasmagoria—for there is no other name for it—of a sunset over this same scene; but procrastination, and the succession of positive wonders in the way of scenery which we afterwards witnessed, have bedevilled that intention; and were it otherwise, *cui bono?* There is suggested just one little moral. Let no man say that the imagination of the artist, the extravagances of the scene-painter, or the ingenuity of the pyrotechnist, with his bluest and reddest lights included, is likely to produce what, in some one or other of Nature's phases, does not find a parallel. There is a belief prevalent that the scene-painter is usually very careful to avoid a breach of the Second Commandment by painting his scenes as unlike as possible to anything "that is in heaven above, or that is in the earth beneath, or that is in the waters under the earth;" but so extraordinary are the pictures which Nature herself here presents, that one cannot resist the conviction that, if he were desirous of doing what Nature cannot do, it "would give him some trouble to do it."

Within a gunshot of Puseygur Point is Coal Island, which presents to the sea a front of a mile and a half, and is about 2½ miles long. Its highest point is 850 ft., but at the seaward end its height is less, and it presents a considerable area of table land, the soil upon which, we were told, is of the very best. Of course, at present it is—as is all the West Coast—covered with heavy and valuable timber. In its proper place, I shall refer to the different descriptions of timber which are here and elsewhere prevalent, and to their probable uses; for, we subsequently met with one who is a good authority on these subjects—I mean Mr Beverly, of Dunedin; and his presence on board the steamer, at a later stage of the voyage, constituted, in itself, a considerable accession to our sources of information. The sandstone formation of the island is very visible, despite the rich clothing of shrubbery on the cliffs, and it is an observable feature that the strata are more horizontal than at Puseygur Point, or in the country to the eastward, which, on the suspicion of coal existing there, well deserves prospecting. A noble harbour opens between Coal Island and Gulche's Head, and this is Preservation Inlet—a mile and a half in width, and more than twenty miles in length, with the usual characteristics of the inlets of the coast, the soundings being shallowest at the entrance, and towards the head deepening, and deepening still, until the surveyors are content with putting down the depth at fifty, or a hundred, or hundreds of fathoms, and "no bottom." Without any theoretical disquisition as to the formation of these inlets, it may merely be said as a guide to subsequent references, that the accepted opinion is that they are no ordinary excavations of the sea, but the valleys of a country once much more elevated than it even now is, and which, in consequence of their depression at some period, and of Nature's abhorrence of a vacuum, became filled with the waters of the ocean. Steaming close by the northern shore of Coal Island, we could see some relics, in the shape of woodwork, of the visit of the cutter "Pilot's" party of coal prospectors, and on the first beach inside of Gulche's Head, on the north side of the Inlet, we could distinguish a beacon which we accepted as an index of the presence of the coal-miners from Dunedin; but we could see nothing of the party. Fronting us was Cavern Head—one of the



GEORGE SOUND

several promontories which, with as many or more islands, distinguish the inlet from others to the northward. In the words of the school-geographies, this headland "derives its name" from a square aperture fronting the sea—the doorway to the home of some amphibious mountain giant, or to the boudoir of naked naïads, just according to the direction of one's imagination.

We fondly anticipated that some human form divine, rather than mountain or marine divinity, would present itself upon the beach, but the whistle of the steamer produced nothing but empty echoes until a look-out in the rigging distinguished the "Lapwing" cutter, moored by ropes to the shore, in a quiet cove, in the shelter of Steep-to Island; and even then humanity, in the persons of the mate and a man on board the cutter, partook of the pacific disposition of the elements on that particular evening. It was only when a boat went alongside that they emanated from their refuge from the sandflies, and looked upon the face of six anxious inquirers, who desired to know something about coal, Coates, Hutcheson, and Cuttle Cove—our anchorage for the night. The corner in which the cutter lay is safe enough, and a usual resort with Maori boats, as it once was with the boats of whalers, but it is comparatively exposed, and scarcely capable of accommodating more than one craft. Ashore there is a little patch of what was once a clearing, but what is now a cheerful shrubbery—the spot whereon the whalers had erected their try-pots, and revelled in rum and blubber. We received the information that Mr Coates and party were at Daggs Sound, prospecting, and that the coal-workers had bored through seams of various thickness. Returning to the steamer we steamed across to Cuttle Cove, the second anchorage on the northern side, and another resort of the whaler in "ancient times." In this crescent bay, distinguishable by a small circular island on the margin of the anchorage, the steamer dropped anchor in seven fathoms of water; but she might have gone closer in, for the whalers were in the habit of lying so near that you might adopt that nautical means of mensuration—"toss a biscuit on shore." It was the first impulse to proceed at once up the Inlet, and to camp out for the night; but superior judgment, and a rapidly-vanishing twilight, had their influence; and "eager for the fray" as everybody was, the alternative of being on foot and in his place in the boat at two o'clock in the morning was accepted.

What remained of daylight was largely employed in fishing, and blue-cod, trumpeter, and crayfish came up from the depths, and in over the side, with an ease and rapidity which almost signified that they rather liked it. Some who went ashore found, back among the woods, where was once the beach, or ground cleared by the whalers, tons of iron-hoops and *débris* of a whaling station; and at very short distance from the shore were seen specimens of the timber of the country which might well make one wish that there were enterprise and trade to encourage hither, as the successor of the whaler and his harpoon, the woodman and his axe.

There was incidentally gleaned much that was of practical value with regard to the coal, timber, and cultivable character of cleared ground in this neighbourhood. Next day was Sunday, and it was considered that the early hours of the day might be worse spent

in slumber on board, or idleness on the beach, than in seeing the marvels of Creation in Preservation Inlet; and, as His Honour did not refuse the use of one of the boats, a party started at two o'clock in the morning to the head waters of the Inlet.

The Inlet is studded with islands. Some of these, with the facilities for fishing by which they are surrounded, afford ample space for comfortable homes to even more dainty people than the hard-working and hybrid race who, in the Northern and Western Islands of Scotland, are content, or compelled, to dwell on a patch of peatmoss, and to obtain a precarious livelihood from the resources of a rougher sea. Others are mere miniature islets, or mammoth flower-pots, such as lend a quaint charm to the scenery of the Thousand Islands of the St Lawrence. The smaller of them are almost level with the sea—the very peaks of hills protruding above the water-level; and though apparently liable to the surge of the ocean, concealed in a covering of vegetation—usually shrubbery of every variety, but often a group of the birch trees, distinguishable by their candelabra branches, or the iron-wood, at this season as easily recognised by its attractive scarlet flower. They were just tipped with the first streak of daylight, as we passed up towards the shaded and frowning cliffs of the upper waters of the Sound. To reach these we had to row towards the south side of the Inlet, where the cliffs descend almost precipitously from the high terrace-land beyond. On the north side, the hills are not actually precipitous, but their slope is of inconsiderable value, so far as affording a footing for man, or the implements of agriculture, even if the bush were not there. After two hours' pulling between cliffs on the one side, and on the other side the densely wooded shores of a peculiar peninsula by which the Inlet is divided, we reached a spot marked on the chart as Sandy Point. The name is not exactly descriptive of the beach, for it consists of yellowish granite gravel, of almost uniform size and angular form—not by any means a bad substitute, if it were within reach of a City Inspector, for the best screened road metal that he could procure. It was half-tide when we landed, and the beach—welcome to us by its very exception to the prevalence of the perpendicular in every object around—was so well defined by the vegetation, and the water of the Inlet, and so sweetly kept by the ripples of the tide, as to look more like a well-kept drive in a nobleman's domain than the *débris* of a stream, which, with 400 or 500 acres of bush behind, it evidently is. Leaving one or two of the party at this spot to "boil the billy," we pulled still farther up the Inlet till we entered the waters of Long Sound—darkened by the influx of the stream at its extremity, and the shade of the surrounding hills, 2000 and 3000 ft. high. To the practical man, the aspect of this locality is not an enticing one—the hills high and precipitous, so bare of soil upon their sides as to defy the growth of vegetation, and with grass growing only towards the summits. Nature, with a due regard to decency, endeavouring to cover its own nakedness, wherever a rag will hang. The whole formation is apparently granitic.

Returning, we pulled in towards a bare granite cliff, and tried it with the hammer. There was one grand mass of it free from vegetation and in form somewhat resembling a man's head and shoulders—it might be Atlas himself holding up the world. Where

his feet were, was as much a mystery as it has ever been. They were deep down among the dark waters, for the chart showed here fifty fathoms, and no bottom at that. We had not time to immortalise ourselves by inscribing our names upon his breast-plate, but we took the liberty of chipping off corners of his epaulettes or shoulder blades, and that was just as much as could be done. Had time permitted, and had we been possessed of the proper implements, both the time and the implements might have been well employed, here and in other places; for it is no great stretch of the imagination to believe that if a few blocks of this granite, or of other descriptions which abound upon the West Coast, were landed on Melbourne or Dunedin wharf, a lively interest would be excited as to their utilisation for building or for monumental purposes. It was only a few days ago that headstones and memorial monuments of Aberdeen granite were received in Dunedin. Here there is as much granite as will build all the houses, pave all the streets, contain the records of all the good qualities of all the good people in all the cities of New Zealand; and it is an important item, in the considerations of profit and loss, that in all situations it can be had free of land carriage. It is a beautifully mixed granite, and, if the quarryman could but find a market, he could almost, without lift or purchase, slide it from its natural bed to the vessel's hold. It is not impossible that a calculation as to the cost of working it, compared with the land carriage and shipment of the Oamaru stone, would prove to be in its favour as the cheaper material of the two. As we were situated we could only look at it and speculate, and from the resemblance of this mass of it to the granite of Bon Accord, we took the liberty of christening it "Lord Aberdeen." Alongside of it was not altogether the situation for reverie, for, as we lay on the oars, big drops of water fell from the overhang of the cliff, striking one's skull, if he was foolhardy enough to leave it bare, with the hard crack of a piece of the granite itself. At one part, a stream trickled down the face of the stone, giving it an almost artificial polish; and both up and down this same branch of the Inlet, there were a few picturesque waterfalls, like diamonds in the emerald sides of the hills.

The beach of Sandy Point, to which we returned to sit for half an hour around our "billy," pendent from a birch-tree branch, is, though pretty, rather a monotonous one, being destitute of shells. Under water, however, we could see cockles, clams, and mussels, though only of the common sort. Small dark wood-hens gazed at us from the beach till we closely approached them, and then tripped into their leafy boudoirs, undisturbed. This was not so, however, with a more attractive little bird—a "crow" or a "jack." It excited the curiosity of the member of the party who had, if anything, a fancy for natural history, without reference to any particular department, and there was a lively pursuit, in which, I judge, the bird had the best of it, as it was not forthcoming, and because the natural historian, as he re-appeared, did so with the extremities of his shirt-collar at an acute angle of his ears, and his hat "void and without form."

Some of the party had, in the interval of our absence, landed at the coal-workings, near Gulche's Head, and simultaneously with them landed Mr Coates, Mr Hutcheson, and Mr Beverly, after an eleven days' hazardous journey of exploration northward. In

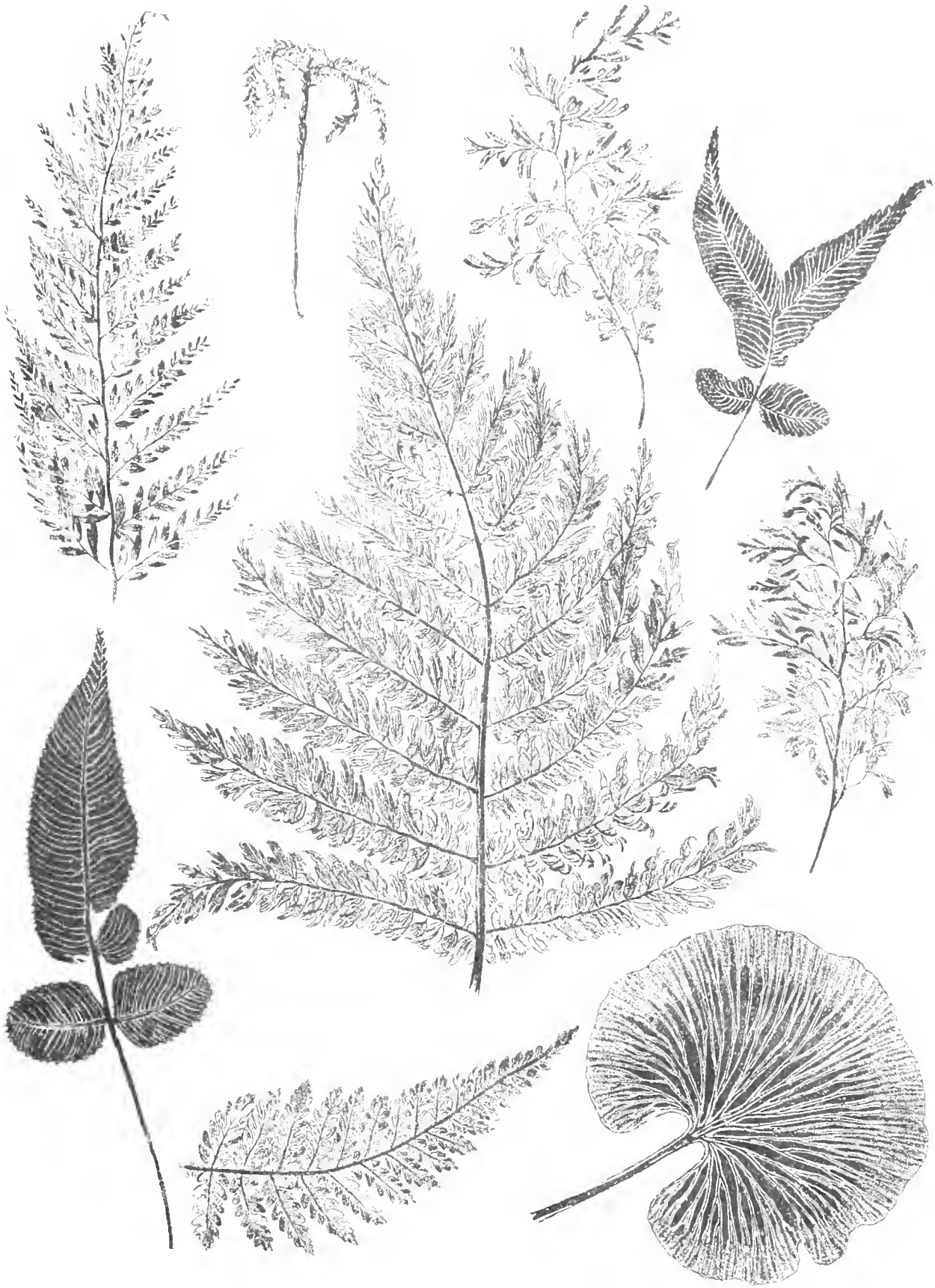
the afternoon these gentlemen came on board the steamer, and we got an accession to our yet trivial collection in the form of a Kakapo (or ground parrot, a rather large bird of brilliant green plumage), and a Toke-weka—a bird larger than the common Kiwi, resembling an Emu, and accepted as probably a lineal descendant of some branch of the family of Moa. They had with them a dog, which bore upon his pate traces of an encounter with a "wig-seal"—a father among seals, five of which the party had killed. This was not his first encounter with seals, as he had been previously the associate of Maori sealers, and he was received by his owner with all the attention due to a conquering hero.

CHALKY INLET AND DUSKY SOUND.

I have said that at Preservation Inlet we met Mr Beverly, of Dunedin, and in him we met an enthusiastic, and, what is more to the purpose, an intelligent student of Nature. It will not be difficult to estimate his enthusiasm, when it is told that, for three weeks, he had been buffeted about the Straits in the roughest of weather; that, for a fortnight afterwards, usually under a drenching rain, he had been walking, climbing, and creeping among the dripping foliage of this West Coast; and in that time had accumulated a valuable collection of plants, shrubs, and trees, and it was in the hope of increasing his store and his lore that he agreed to join us on the journey to Martin's Bay.

Let us sit down on the deck with Mr Beverly for a few minutes; examine his collections; and listen to his comments.—In his opinion, there is no country of so short an age which has been so thoroughly searched by botanists, yet he had got many new descriptions of plants, and, before leaving us, he expected to obtain more. Dr Hector and Mr Buchanan had brought from the West Coast a number of specimens of plants; but no one had yet attempted to bring round live plants, and the season at which Dr Hector visited the coast was not favourable for procuring seeds. It was Mr Beverly's impression that he had exhausted nearly all the known plants to be found between Preservation Inlet and Breaksea Sound; and I believe he got several more at Milford Sound. But, at nearly every camping-place, something new presented itself; and, even as a botanist, it would take years to prospect the country. In exchange for what was thus obtained from Nature's garden on the West side, Mr Beverly brought with him gum-tree and other seeds; and so did Mr M'Indoe, who was also a passenger by the "Geelong." Dr Hector had done the same on the occasion of his visit, and no doubt the produce of these seeds are now flourishing, although the soil, in some parts, is not the choice of gums, as it consists of a mossy deposit upon the granite rock.

The tree which is most abundant among the forests of this part of the West Coast is the birch. It is the predominant feature of the forest inland, as well as along the beach; and, in a few words, it may be described as a tree both useful and ornamental. Next in number and in value is the iron-wood, or rata, of two kinds, one of which is found on the East Coast. It is heavy, durable, and for ships' knees or similar purposes there is nothing equal to it. The bastard birch, or karmai, is a tree seldom found in



SPECIMENS OF WEST COAST FERNS

groups; but it is of large size, and is easily distinguishable by its leaves, and by its long bunches of small white flowers. The next prevailing features of the forest are three pines, all of which are found about Dunedin. The red pines are the most common, and are found very large and straight—usually the monarchs of the forest. The other coniferæ are the black pine and the totara. Another tree, and a singular one, is what is called the black oak, known to botanists by the name which I have irreverently quoted above —*dracophyllum*.

I have previously alluded, in these notes, to the beautiful shrubbery, by which the sea-cliffs of this part of the West Coast are adorned. What we had chiefly admired from the decks of the steamer was a small ornamental shrub, *Olearia operima*, somewhat resembling a crysanthemum. At this season the seeds are ripe, and the opportunity was a good one for those who were so disposed to make a collection. The *Senecio rotundifolia* is another ornament of the coast, and is somewhat of the same description, with a daisy-like flower, but its peculiar leaf is its readiest source of recognition. On the return passage of the steamer, and while waiting at the Bluff, we saw, in Mr Longuet's well-tended garden, some of the shrubs; and they have only to be seen to be appreciated. Its thick leather-like leaves are usually the size of the palm of a man's hand and often six inches in diameter. The *Veronica elliptica* is another shrub common to the coast, its peculiarity being its small leaves arranged in four rows along the twigs. These are the shrubs which chiefly give to the coast its lively appearance, and none of them—at least none of the first two—are found on the East Coast, and they are only known to be obtained at Stewart's Island and the Bluff. As a rule, they do not extend far in from the shore, and are seldom found at a greater height than 200 or 300 ft. from the level of the sea. One other—a pimelia—grows by the water side—a large shrub with a fibrous bark so excessively tough that it can be stripped off in lengths of six or eight feet.

Ferns are not an especial feature on this part of the West Coast. So far as Mr Beverly's experience and the experience of others has gone, the neighbourhood of Dunedin is, perhaps, as fine a field for ferns as there is to be found in the country. About Dunedin there are thirty or forty descriptions of ferns which are absent here, yet there are seven or eight species which are strange, and not only strange, but, even to the uninitiated eye, attractive. These are chiefly film ferns — hymenophyllum and trichomenas. They monopolise the ground in some places, occupying acres of space; and no trappings of human designs could excel them in appearance, when they form part of the drapery of the moss-grown trunk, or the pall of the monarchs of the forest, when they have fallen from their high estate. To a painter like Noël Paton, these would be, professionally, worth all the fungi that a humid climate could produce, or that imagination could invent. Another beauty is the Lindsaea, the fruit of which grows in a groove in the margin between two folds; but that which is most abundant in some of the Sounds, and most noticeable by its gigantic size, is *Lomaria Procera*. Its fronds are comparatively enormous, and in many parts they form a perfect carpet to the sides of the Sounds.

A list of what we found in Mr Beverly's wallet will be useful in showing, at least, some of the resources of the West Coast.

Trees.—*Metrosideros, florida* and *lucida*. Iron-wood or rata. Very large timber trees, with dark green leaves, and a profusion of scarlet flowers. Its wood very hard and heavy. For firewood superior to manuka, and well adapted for ship-building. The *lucida* is obtained at the Bluff and on Stewart's Island, but the *florida*, which prevails on the West Coast, is not obtained there.

Weinmannia racemosa.—The Karmai of the Natives, or bastard birch of the Colonists. A large handsome tree, with opposite-toothed leaves.

Fagus solandri, Menziesii, and *fusca*. —The birch of the Colonists :—the *fusca* being the least common of the three.

Shrubs.—*Hedycaria dentata*, obtained from Preservation Inlet to Breaksea Sound; common. A small straggling tree, with large glossy leaves, well adapted for shrubbery.

Ascarina lucida.—A similar small tree, with beautiful serrated foliage; also found from Preservation Inlet to Breaksea; but not so common as the *Hedycaria*.

Gaultheria rupestri.—A beautiful shrub, producing an abundance of clusters of white flowers and berries similar to the snowberry; grows on the rocks at the sea side; common.

Archeria Traversii.—Another handsome shrub, intermediate in appearance between a young totara and manuka, producing clusters of small red bell flowers.

Cyathodes Oxycedrus.—A handsome coniferous-looking shrub, bearing white berries; very ornamental. It is found in the woods generally at Preservation and Chalky Inlets; but it was less common at Dusky Bay and Breaksea Sounds.

Plagyanthus Lyelli.—A rare form of the ribbon-wood. Grows by the side of small streams at Dusky and Breaksea. It is a straggling small tree, with very large egg-shaped toothed leaves, and white flowers nearly two inches in diameter.

Olearia operima.—A maritime small tree with large daisy-like flowers, about two inches in diameter, and the leaves arranged in rosettes or star-shaped fascicles at the tips of the branches. A very ornamental shrub for gardens.

Senecio rotundifolia.—Another maritime small tree, with very large circular leathery leaves.

Veronica.—A new species, undescribed by Hooker, and supposed to be new. Has lance-shaped leaves, bright green above, and milk-white underneath; and clusters of fine white flowers, with pink centre. Grows by the margins of streams, and found only in Dusky and Breaksea. *Veronica ligustrifolia* and *parviflora*.

A shrub, name unknown. Handsome, and with leaves cottony on both sides. Only one plant was found. Supposed to be a *senecio* or *olearia*.

Pinelia longifolia.—A handsome erect-growing shrub, with excessively tough bark, leaves like a veronica, and clusters of white flowers on the tips of the branches. Got at Dusky and Breaksea Sounds, near the sea.

Dracophyllum urvillearum.—A species of the black oak of the Colonists, with broad grassy leaves and black bark.

Dacrydium laxifolium.—A handsome coniferous shrub, like a dwarf white pine. These last two are found generally in the woods.

Cordyline indivisa.—A climbing species of cabbage tree, which bears large bunches of flowers, eaten by the Natives. It is a climber, trailing along by trees, which it ascends.

Gaultheria oppositifolia.—A handsome shrub, allied to the snowberry. Got at Milford Sound.

Flowers.—*Ourisia macrocarpa* and *sessilifolia*. Robust herbs, with rough leaves, and bunches of large white flowers, and roots which spread like the daisy, and propagate in the same way.

Silmesias.—Two, name unknown. Aster-like herbs, with long cottony leaves, and very large daisy-like flowers. Alpine.

Anthericum Rossi.—A herbaceous plant, with fascicled roots, thick lily-like leaves, and a tall stem, bearing a large cluster of yellow flowers. Got at Milford Sound.

It was scarcely daylight on Monday, December 8th, when the "Geelong" lifted anchor, and steamed out of the snug shelter of Cuttle Cove. The dim light of morning was just discernible over the tops of the eastern hills, and as their western slopes were still in the darkness of night, they looked like a country cut out of cardboard, or a section of stage scenery half lit up. As we passed out of the Inlet close by its northern shore, we had a nearer view of the situation of the coal-seams, and a better opportunity of estimating its value as a shipping place. Should coal be wrought, a short shoot or tramway would readily bring it to the ship's side, and except in S.S.W. gales, a vessel would be sheltered from the swell. As soon as we passed the headland, Balleny Reef

presented its uninviting array of rocks awash, and although a channel exists between it and the shore, known by the suggestive name of Break-adrift Channel, we, on this occasion, passed outside of the reef, and, making a sharp turn to starboard, went between it and Table Rock—what I may, at least this time, be allowed to call a solitary sentinel, with just the crown of his hat above water. By this time the white cliffs of Chalky Island were shining brightly under the rays of the early morning sun. It was originally the intention to have explored the two branches of Chalky Inlet—Edwardson and Cunaris Sounds, and to have examined those localities on the shores of Chalky Island and the mainland where traces of wreck had been found by the coal prospectors, and their friend the botanist, in the course of their adventurous boating excursion to the North; but fearing from the appearances, that we were to have more than a breeze from the N.W., it was thought better to leave this Inlet, and its relics of wreck, for examination on our return trip, and to get beyond West Cape, before its characteristic weather had attained full force.

The relics of wreck found on the beach were a cannon, a ship's figure-head, and a small hatch. The cannon had been found on the shore near Cape Providence, and in our excited imaginations we propounded endless theories as to how it came there, but a distressingly unromantic solution was found to the problem. It is, no doubt, the gun which was conveyed there, about two years ago, for the purpose of making signals, when the steamer "Star of the South" had to be beached after striking a rock, as she was running back to the shelter of the Sound. To the figure-head and the hatch, which lie on Chalky Island, much more interest attaches. What may have been the exact fate of the vessel to which they have belonged it would be hard to tell, but it is just possible that, caught in a gale upon the coast, she had been seeking the shelter of the Inlet at a time when its other name—Dark Cloud Inlet—would more appropriately describe it, and struck upon the reef lying off, in her instance, the ironically-named Cape Providence. A vessel striking there, stem on, might leave little more than her head-gear to drift ashore. I hazarded the opinion that the Balleny Reef was more probably the scene of the wreck, if there was any, but, in that case, the drift would have gone elsewhere with the current, which sets to the southward along the shore. The figure-head was, of course, weather and water-worn; but some of the gilding and paint still remained. It was the figure of a sailor, in white trousers and blue jacket, with gilt buttons—the figure itself being 6 ft. long, and the scroll to which it was attached $2\frac{1}{2}$ ft. in length. The face and arms had been rubbed off; and it is not improbable that there had been also the representation of a hat, for such a thing was picked up by Dr Hector during his visit to the coast. We were not sufficiently "posted" as to dates; but it is suggested that such may have been the figure-head of the American ship "Jack Frost." I am liable to correction; but I believe that that vessel left the Bluff one Sunday evening, in the latter half of 1861; that, on the following day, there was a heavy gale; and that she was never heard of more. The hatch is a small one—about two feet square, and mounted with brass; and, from that particular, it is judged to be the hatch of some ship's lazarette.

We had hoped to bring them with us to Dunedin, where there might be more chance of their being recognised; but an opportunity did not afterwards present itself for this being done.

Of the two islands which divide the entrance of the Inlet, the larger, Chalky, is composed of a white sandy clay, not unlike Arbroath pavement, and, from the appearance of detached blocks scattered along the beach, it is not impossible that it might be applied to such a purpose. It is stratified, lying in horizontal layers, nearly as straight and as numerous as the leaves of a goodly volume. The other is of red granite, and there is reason to suppose that here, or on parts of the opposite shore, granite may be obtained not inferior to the famous granite of Peterhead. The peculiar feature of these Inlets holds good here, as well as in their upper reaches—there is deep water close to the shore, and, if there were inducements to quarry the rock, it might be shipped with the greatest ease. It was on the smaller island that Mr Beverly and his companions had their camping place for five days, under "adverse circumstances," a cave 60 ft. long, 20 ft. high with free ventilation, being open at both ends, and with pretty, but rather cold, red granite walls. The vegetation on both islands is similar to that on the mainland, but, as usual on most of the islands, it is comparatively scanty. The forest is chiefly of birch.

From Chalky Inlet to Dusky Sound, the coast runs in a comparatively straight line, West Cape protruding slightly midway. The cliffs are about two hundred feet high, bordering terrace-land, from a mile and a half to two miles in breadth, broken by small rivers and ravines; and it again borders a stretch of undulating country, rising gradually towards the hills behind. The rock is granite or gneiss, and it is covered with an elastic mossy soil, not very favourable to the pedestrian, under such conditions as those on which it was traversed by Mr Beverly, even with a liberal use of seal's or woodhen's oil as a substitute for Warren's blacking. The forest is mostly of red and black birch, dispersed in nearly equal proportions; and, as usual, where birch asserts its supremacy in the bush, it grows to a considerable height, and free from branches to the very top. Here the average height of the trees is from 70 to 80 ft.; the diameter of the trunk about 2 ft.; but many of them are 4 or 6 ft. through. At the northern extremity of this stretch of country, there are numerous patches of heathery or grassy-looking land, but only patches—handy habitations for a few coveys of grouse. As a whole, it is the last piece of country on the coast, until we reach Martin's Bay, which is of sufficient extent and character to give the hope that it will be some day populated.

Unfortunately for our realisation of entire novelty, but very fortunately for safe navigation, we had been anticipated as visitors to Dusky Sound. Vancouver and Cook had both been there before us; and by both, I daresay, it is elaborately described. I can just remember having seen in an old edition of "Cook's Voyages," an engraving of Dusky Sound, and a very accurate representation it is; but had Cook entered the Sound under such circumstances as we did, he would certainly not have named it Dusky. The circumstances were, no doubt, unusually favourable. Just permit one little extract from

the notes taken at the time:—"Over the more distant hills an indescribable filmy haze hung, from the blue tinge of which the islands in the foreground (their names are Indian and No-man's) stood out in bold relief. Except to the North, where a white gauzy cloud served to show more sharply the outline of the mountain-tops, there was not a speck upon the firmament, nor was there more movement of the air than to give liveliness to the picture by the ceaseless, shifting, silvery, sparkling of the waters of the Sound." You will observe that the note-taker was just beginning to "gush." Briefly, the fact was that it was a very fine morning. And the scenery is magnificent. It is one of the most splendid harbours on the coast, if, in that matter, there is at all room for comparison; and it had more interest for us, because it had not been made familiar by a visit from Dr Hector, or by recent expeditions of whose visit any accurate account had been given.

The northern shore of the Sound is defined by a long and comparatively level arm of Resolution Island, terminating in Five Finger Point. Resolution Island proper presents a series of purely pyramidal hills, 3000 and 4000 ft. high. These, as we enter the Sound, are partially concealed from view by Anchor Island, which forms but one, and the largest, among a perfect labyrinth of islands and rocks, some of them favourite resorts of seals, and of their enemies, "in their season." On this island the coal prospectors obtained some white felspar, which was found deposited in sheets or layers 2 or 3 ft. thick. The ranges on the south side of the Sound are more rugged. At its head or in the interior, there is a long line of them, snow clad.

While the majority of us were musing, or giving open expression to our admiration of the scene, the Secretary for Lands and Works was fidgetting, like Noah's dove, for land whereon to set his foot. A belief had been engendered there was level country behind the ranges southward of the Sound, and the Secretary determined to satisfy himself on the subject. Passing Pickersgill Harbour—a favourite anchorage of Cook—we steamed into Cascade Cove—a sort of elongation of what the higher part of the harbour of Port Chalmers would be in its primitive state. Here the Secretary, the Surveyor, and Mr M'Indoe were landed on a small timbered tongue of land, formed by a land-slip, and they addressed themselves to the task of ascending a hill nearly 4000 ft. high. For 3000 ft. of its height it is covered with bush; and, if to memory dear, they were at least for five hours lost to view, and it was nine hours before they returned.

DUSKY AND BREAKSEA SOUNDS.

Cascade Cove, in Dusky Sound, I have compared to Koputai Bay, or what is now known as Port Chalmers, before the settlers had substituted, for its tall totaras and red pines, the present leading features of the landscape—churches and hotels. But it is Koputai Bay on an extended scale, for it is a mile and a half in length, a third of a mile in breadth, and its depth is such that it was only when the "Geelong" got close up to a sandy beach, at the head of its waters, that anchorage was found. An item in the resemblance is the existence of a level, or at least low, piece of ground at the head of

the Cove, large enough to admit of a few settlers carving for themselves, from among the bush, very snugly sheltered homesteads. Through it flows a small stream, and, while the Secretary for Land and Works, and his two companions, were climbing the hill, and finding their work a great deal less of a joke than the funny men of the community seem to think, a party of us landed and followed its course for a few miles. The digging party also landed, and went prospecting. There are several branches of the stream all of them flowing over a granite shingle bed, closely overhung with fuchsias and ferns. Not more than half a mile up we were attracted by the sound of falling waters, and turning abruptly eastward came to one of the most picturesque cascades that, probably, any one of us had seen, either on the West Coast or elsewhere. It is not the water-fall from which the Cove derives its name, and which falls down the thickly-timbered hill-side near the entrance, but another, and, pictorially, a better. The stream had scooped out for itself a basin of considerable size in the hard granite rock. Fed by the constant spray, rich mosses grew upon its concave sides, and ferns were pendent to the water's edge. Only where the sun was able to penetrate the deep shade of the bush, and give light and warmth to the damp ground, there grew a pretty white flower, which, though minute, was almost brilliant compared with its surroundings. We missed Mr Beverly to give it a name, but, no doubt, he has it in his collection if it deserves a place. Across the cascade a fallen log had laid itself with such precision and appropriateness of situation for its uses as a bridge, that one was almost tempted to believe that it was an exhibition of the engineering skill of the supernatural inhabitants of the spot, and to linger near in the hope of seeing some of them tripping across it on one of their amiable or evil errands. But they were apparently from home, or averse to the visits of the strangers. Bold in the knowledge that, except a pencil, we had no lethal weapon with which to knock him off his perch, an obviously infernal kaka so upbraided us for our intrusion, that we reluctantly came away, unrewarded by seeing anything more marvellous than the natural marvels of the place; but these were enough. What we saw in the bush around, and in the further walk along the stream, would, no doubt, charm the poetic bush-ranger; but poetry was not a recognised element in connection with the expedition. The prospectors thought they had hit upon a place where the "reef" protruded; but they were mistaken, and they were disappointed in the few washings they attempted. At the assembly, for the purpose of returning to the steamer, several came with contributions to the providore—one with kakas, shot in the bush; another with crayfish, which had been found perambulating the beach, innocent of the presence of an enemy; and a third brought off a live wood-hen.

The interest of the party was, however, less directed towards their own exploits than to the more elevated proceedings of the three who were climbing the hill. From the precipitous character of the spurs which they had attempted to ascend, and from the apparent density of the bush, it was feared—more than once insinuated—that they would be compelled to return. The fear was, however, soon dispelled. It was agreed that, as they ascended, they should "make a smoke;" and that signal was given when they were

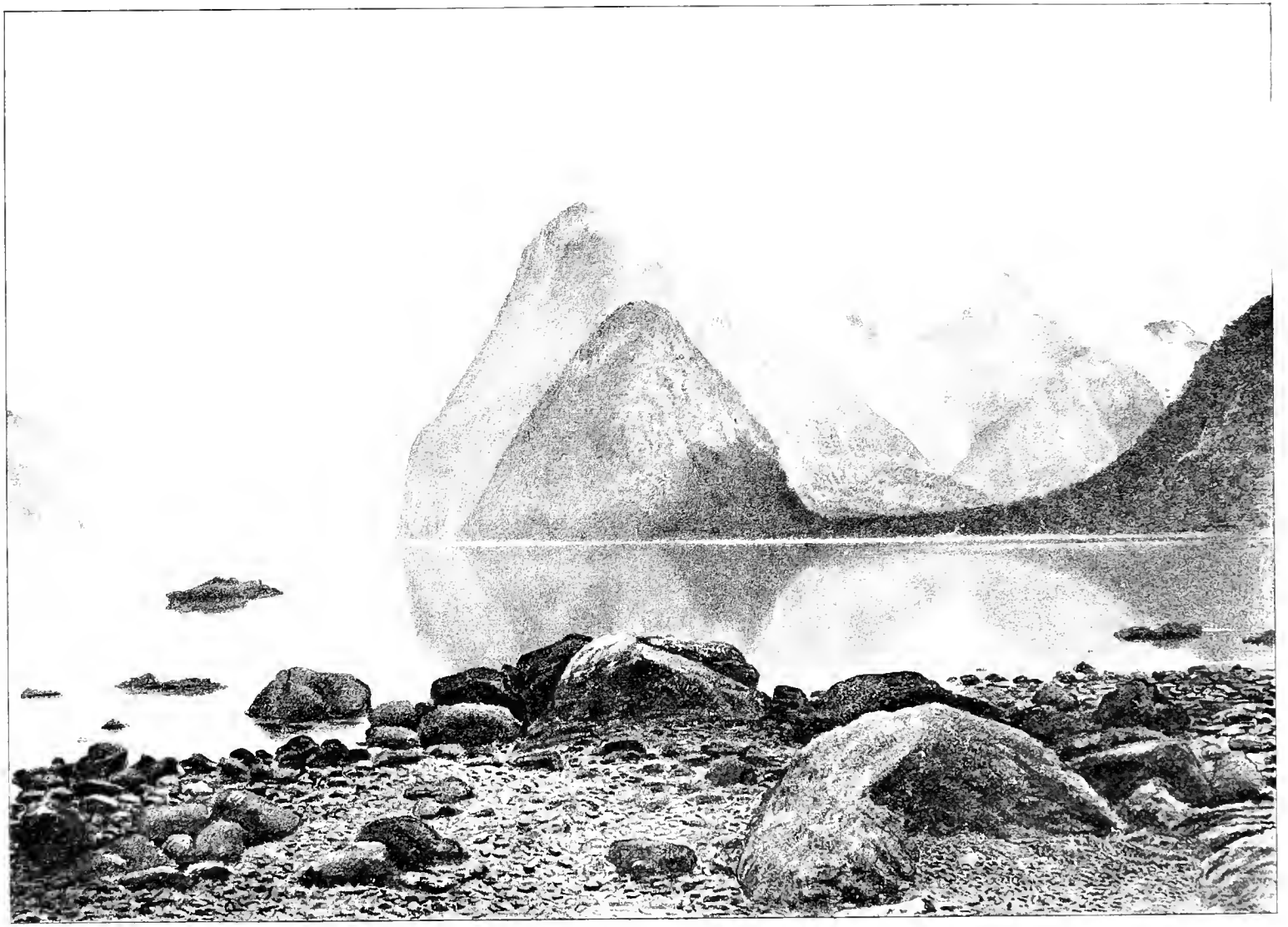
half-way up the hill-side. An hour afterwards another smoke was visible still higher, and then a third; and as it was close to the highest level of the forest, the figures of the three mountaineers were looked for eagerly by the aid of the glass. Another half-hour, and a smoke and the party themselves were distinguished, about 500 ft. from the summit, or where the forest ceased; and in a few minutes more the mountain-top was ablaze, and we on board the "Geelong" did what they on the hill were, no doubt, also doing—we breathed freely. The ascent occupied five hours, and involved a considerable use of the hands as well as of the feet. The descent did not occupy half of that time, but it was revealed, by the appearance of the habiliments of the party, that it had been accompanied by more than merely the exercise of the pedal and digital extremities. It was confessed by the Secretary for Land and Works that though, physically, he presented no peculiar adaptation for the performance of acrobatic feats, he did on this occasion accomplish some evolutions of a rotatory character which were quite unexpected on his part, and not a little astounding to himself, as well as to the two privileged spectators.

The ascent of this particular hill, I have already explained, had been undertaken for the purpose of setting at rest a suspicion as to the existence of some available land, in continuation of the comparatively level country which skirts the coast between Chalky Inlet and Dusky Sound. The day was favourable for an uninterrupted view, and a large extent of territory was visible in all directions from the point where the party stood; but it was found to form more a subject for graphic description, or a panoramic painting, than for entry on the Survey maps as country capable of settlement. There was a steep descent on the landward side of the hill, and a narrow but deep ravine intervening between it and the nearest range. The next range was, in fact, almost within gunshot, and beyond it there was a continuation of similar ranges, with steep sides, strangely serrated summits, and scarcely a vestige of vegetation. Utterly impracticable as the country is, it is not, however, without interest. Its general appearance, and especially the indications of the slips, so far as they could be seen, led to the belief that a great part of the district, both to the southward and eastward, is of gold-bearing slates. The hill which the party ascended was found to be of granite, but of granite different from what had been seen in the other Sounds, being both micaceous and felspathic. Occasional fragments of gneiss were picked up, and on the summit it was got *in situ*; the gneiss also containing a considerable proportion of mica and felspar. Two lakes were seen—one at the extremity of the ravine, which extended southward from Dusky Sound for a distance of fourteen or fifteen miles, and another within a mile or two of the head of the Sound. Such parts of the country as were timbered did not appear to be heavily wooded, and even the seaward front of the mountain, up which the party had climbed, was found to be much more than its aspect, as seen from the deck of the steamer, would lead one to suppose. At one place the trees were so far apart and regularly disposed as to resemble an artificially-formed avenue, and there were numerous tracks similar to those of sheep, and which were, probably, the tracks of the kiwi or kakapo. A slight addition was made by the party to the botanical collections, some obtained from the very

summit of the hill. These included specimens of the Ranunculus, believed to be *Ranunculus traversii*, and of *Celmisia verbascifolia*, *Senesio bifistulosus*, *Ourisia sessilifolia*, *Ourisia macrocarpa*, and one or two other plants which it was impossible to recognise by Hooker's Handbook, or even with Mr Beverly's assistance. They are probably new. The view from the hill-top seaward, as may well be imagined, was something to leave a long-lasting impress on the mind, numerous islands being as much a characteristic of Dusky Sound as of Preservation Inlet, with this difference, that they are of larger size, greater elevation, and more variety of contour.

It is not at all unreasonable to suppose that the time will come (and it will come the sooner by the character of the country being more popularly known), when the cities of the Southern Colonies will send excursionists by the hundred, or by the thousand, to see such sights as those presented by Dusky or Milford Sound. There cannot be many places in the world where the sublime can be so readily attained as in this Sound, or that of Milford, accessible as they are by steamers, from end to end, and among what may be said to be a maze of mountains.

It was by the channel to the southward of Long Island that the "Geelong" steamed up towards the head-waters of the Sound. On the map, this passage appears almost too narrow to be navigable, and in reality it is not more than two cables' length wide, but its depth varies from forty to seventy fathoms. The range on its southward side is, throughout its entire length, almost perpendicular. It forms a fitting prelude to the panorama which presents itself as you approach the head of the Sound, and which we saw not by the morning light, as we had expected, but under the rays of the setting sun. We were not, however, losers by the change. The sun had scarcely sunk sufficiently low in the horizon to cast upon the snow-peaks that peculiar purple tint which is frequently the effect of the light of evening on the West Coast. They were still in their virgin whiteness, gleaming in the sunlight, with the moon behind them, so subdued and pale as to seem almost timid to appear upon the scene. There was still, also, nothing of the dusky character which the name of the Sound implies. The sky was cloudless, and the variegated tints of the forest were even more brilliant than under the mid-day sun. It was only when we had reached the strange looking strait which communicates with Breaksea Sound, that the set sun poured out its purple light upon the hills, and threw our immediate surroundings in the shade. I have not, as a rule, referred to the "New Zealand Pilot," nor relied upon its valuable information, but a conception of this peculiar arm of the sea can be better communicated by the description there given than by any word-painting, three coats thick. It is said—"The arm connecting Dusky and Breaksea Sounds runs in a N. by W. direction, eight miles, with an average width of half a mile, and is formed by the eastern shores of Resolution Island and the mainland. High precipitous, and wooded mountains rise on either side to heights varying from 3000 to 4000 ft. Soundings were only obtained in the middle of the channel at depths of 200 fathoms, and so perpendicular are the shores that 80 fathoms were found within a few feet of them." I only know that the picture produced by these facts, and by "demesnes



MILFORD SOUND.—THE LION

that adjacent lie," had a very significant influence upon the powers of speech possessed by the passengers on board the "Geelong." The most liberal quotation from the language of genius is almost unavailing in conveying a conception of some of Nature's pictures on this West Coast, and, as it was, our party had not been "coached" for the occasion in that particular, nor was the presence of native genius revealed. There were as many of us, perhaps, as there were wounds in Cæsar's body, and, like them, we were "poor, poor, dumb mouths"—by our very silence eloquent of our admiration of the grandeur of the scene. We all quite agreed with the practical man—that to make the country available, there must be a new dispensation; that it was formed, not for the present race of pigmies, but for a nobler race to come after. There was one picture which almost suggested that the nobler race had already come. On a terrace, about 3000 ft. high, there had been a slip, and even to the least imaginative amongst us, it assumed, by the peculiarity of its outline, the appearance of a man. I think we compared him to a solitary sentinel—a weird warrior, on one of the watch towers of the race of giants who, it might be, inhabited these hills. This is no romancing. The illusion was most complete.

Midway, in the sail through this Strait, we opened up Wet Jacket Sound. It is a smaller sound than the others; but, like them, it presents nothing but the picturesque—snow-clad hills descending right into the sea.

It was resolved by His Honour, after leaving Breaksea Sound, to proceed direct to Martin's Bay, calling only at Milford Sound on the way, and leaving any of the other Sounds which it might be desirable to visit until the steamer was on her way back. As we steamed out of Breaksea Sound, the moon was just beginning to outshine the last light of the sun, and we enjoyed a bright moonlight night along the coast; but its features, except when seen in detail, are not attractive. They are sufficiently grand, but lose by comparison with what we had seen, by what some of us knew to be waiting us further north. Running closely inshore as we did, we could see nothing of the back or snowy ranges, and the view, if it was not dismal, had a dark and frowning aspect. In most parts, the mountain sides go down into the depths of the ocean, as in the Sounds. It is only to the southward of George Sound that we get the first glimpse of a beach of any kind. There is here an apparent change in the rock, and up to Bligh Sound the ranges have more of the indications of schist, or of a gold-bearing country. South of Bligh Sound, the remnant of a terrace protrudes into the sea, skirted by a beach of white sand, and a similar beach was seen in Catseye Bay, and it was the intention to have visited them on our return; but in that we were disappointed. From this point northward, the grandeur of the scenery accumulates. The snowy ranges come close to the coast, and a view is obtained of the three easily-recognised commanding peaks which form some of the magnificent surroundings of Milford Sound—Pembroke, Mitre, and Lawrenny Peaks. On each of these there were visible fields of snow, thousands of acres in extent, and of a depth probably measurable by fathoms. As we saw them they were cloudless. Only from one or two of the Sounds, banks of white clouds, at a

low level, came floating out seaward, and were dissipated as the sun gained strength. Southward the hills were like so many green pyramids in a bright blue plain; northward the land was overhung by a thick haze, which, as it happened, prevailed also on the following morning, and had the effect of misleading us as to the locality of our destination.

A landing was effected in the whale-boats at a place called Transit Beach, and we afterwards entered Milford Sound.

MILFORD SOUND.

Transit Beach, where we effected our first landing after leaving Dusky Sound, is a short stretch of shingle beach, a mile or two to the southward of Milford Sound, and quite exposed to the ocean swell. Along this part of the coast, between the Sounds, there are several small bays, or inward curves of the shore-line, which, when seen from a short distance out at sea, are somewhat deceptive. Apparently they are openings to Sounds of inferior size, but, when seen more closely, their beaches become visible, and they are discovered to be Sounds which have, at one time, been converted into dry valleys by the deposit of moraines. Transit Beach is the beach of one of the smallest of these valleys, being only about a mile in length, and the stretch of forest between it and the mountain-foot is of inconsiderable extent. The diggers of the party expressed a wish to land here, and one of the boats was placed at their disposal. They appeared to land easily in a snug corner at the northern end of the beach, and proceeded to prospect the same, and a bank of the small stream which there flows into the sea. In one of the whale-boats, some others of us attempted to land towards the southern end of the beach, and we succeeded in doing so with considerable ease, but the experiment is not one which it is advisable at all times to undertake, even under such circumstances as those with which we were favoured. Around the steamer, a mile or more offshore, the sea was of an oily smoothness; the swell was all but imperceptible; and there appeared to be just enough of ripple on the beach to wave a mermaid's hair. But we found, when we got into the shallower water with the boat, that there were big blind waves rolling in, and on some foul ground there was a considerable surf. We got a good "smooth," however, and landed with only one little incident. Our friend the botanist, as the boat touched the ground, got tipped over the side, taking his wallet with him, and a large amount of our sympathy, although it was not, at the moment, exhibited. With his face towards us, he pirouetted, turtle fashion, for a few seconds, but picking himself up, demurely walked ashore, smiling at his own grief; and I positively found him, not five minutes afterwards, with his enthusiasm nothing damped, and glowing with appreciation of a *Dracophyllum axillearum*, or a *Dacrydium laxifolium*, as if sea-water was altogether of secondary importance. The beach is a steep one, indicating a considerable weight of surf, and is composed chiefly of shingle with occasional patches of sand. It is backed by a terrace, 20 or 30 ft. high, similar to those terraces which, on more northern parts of the West Coast, have been found to cover ground richly auriferous. We washed

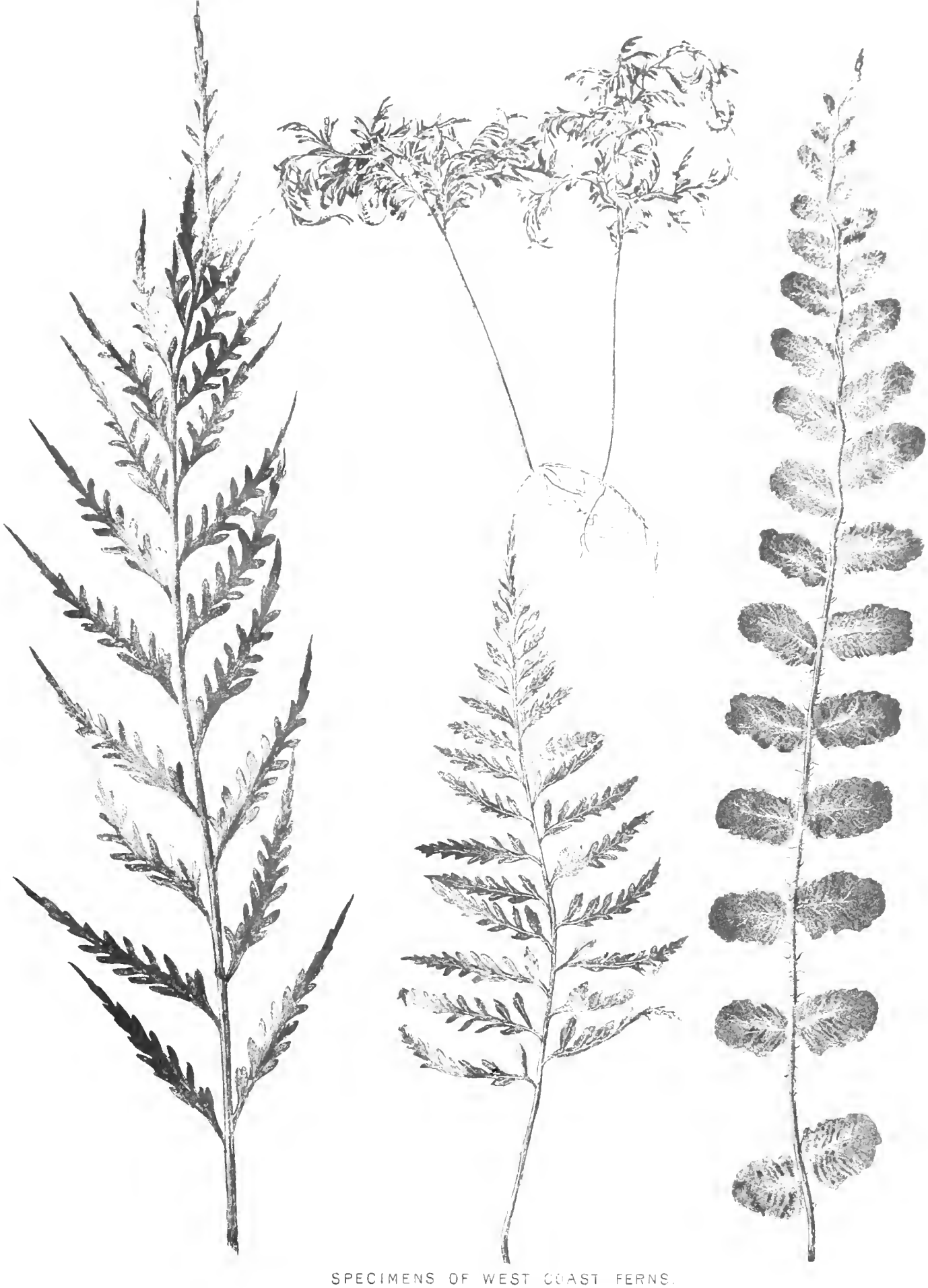
a few shovelfuls, but there was not a speck of the true black sand. The weightiest was sand of a peculiarly light colour, apparently decomposed granite, and possibly containing garnets. Among his gleanings, Mr Wright got specimens of hornblendic and felspathic schists, of gneiss, and of what was at first accepted as crystallised felspar, but which, since experiments have been made in Dunedin, has proved to be limestone or marble. It is the same as some pieces of stone which were recently brought round from the West Coast by the "William Miskin"—obtained, I think, in Anita Bay, not far from this beach, and is stated to be a pure marble, with crystals of considerable size; but one or two specimens were got, in which the grain was very fine. In pulling off from the shore there was just sufficient of commotion, and of cold water about our ears, to communicate a sensation of excitement, without alarm; and with a proper division of labour, in which the Secretary for Land and Works was deputed to attend to the bailing of the boat, we got safely alongside the "Geelong." Leaving the diggers on shore to continue their prospecting, the steamer steamed to Milford Sound.

It must be with extreme diffidence that any one would address himself to the duty of describing such a sight as that which is presented by the magnificent scenery of Milford Sound. There is a double difficulty to deal with. It is not easy to convince people, and especially those who may have "looked down Vesuvius," or, for that part, looked down upon the whole world, and "found nothing in it," that in even indicating its outline there is not a straining of language to achieve an empty effect. And there must be conviction on the part of any one who has seen it, and who has seen other sights with which he can compare it, that to attempt to convey any idea of its sublimity by a mere arrangement of words, is to attempt that in which he can never command success. There is the further danger that in aiming at an expression of his estimate of the sublime, he will degenerate into the ridiculous; for that is marvellously easily done. As we approached the entrance to the Sound, and were just on the eve of realising, according to our own individual conceptions, the sublimity of the scene, one of the party pathetically said—and it was a sufficiently appropriate expression to indicate its comparative greatness:—"If you have tears, prepare to shed them now!" But was there a universal acknowledgment of his appeal? Not a bit of it. The steward rang his bell for lunch, and, for the convenience of the company, brought upon deck his mutton cutlets and pork chops; and there were some among us, who, as aids to digestion, preferred the perusal of the contents of a yellow-covered novel to the "sermons in stones, and books in the running brooks," which were presented in extravagant abundance along the sides of Milford Sound. It must not be deduced that this was an index of the spirit of the party, practical as was the purpose of their presence on the West Coast. There was no lack of an adequate appreciation of the solemnity of our surroundings; and I only refer to this, in passing, as an incident illustrating the proverbial thinness of the line between the sublime and the ridiculous, and as an excuse for your correspondent not incurring the danger of getting on the wrong side of the line, by attempting a description of the scene. For the second time, I must take refuge for the facts in the

text of the "New Zealand Pilot," and supplement its statements by a record of our cursory observations; and I do so in the belief that it is humbug to say that Milford Sound is, even to New Zealanders, in any degree familiar as a household word:—

> Milford Sound, the northernmost of the series of inlets on this coast, though comparatively inconsiderable in extent, yet, in remarkable features and magnificent scenery, far surpasses them all. The mountains by which it is surrounded are the highest on the coast, with the exception of Mount Cook, 120 miles north. Pembroke Peak, about 3 miles inland, perpetually snow-capped, rises over its northern side to an elevation of 6700 ft.; and Lawrenny Peak, a very remarkable saddle-backed mountain, attains nearly the same elevation on the other side. But perhaps the most striking features are the remarkable-shaped Mitre, rising abruptly to a height of 5560 ft. immediately over the south side of the Sound, and a dome-shaped mountain on the opposite shore, nearly bare of vegetation, which, from its peculiar colour, resembles a huge mountain of metal. These Alpine features, and its narrow entrance, apparently still more contracted by the stupendous cliffs, perpendicular as a wall from the water's edge to a height of several thousand feet, invest Milford Sound with a solemnity and grandeur which description can barely realise.

This is a compact summary of the prime elements of the scenery which gives Milford Sound its peculiar character, and they must be admitted to be not every day encountered even in such coast sailing as New Zealand presents. As presented to us they appeared under an almost cloudless sky, and with an atmosphere so clear that we could see to the summit of every peak, and, while realising the majestic dimensions of the mountains, could distinguish clearly their more minute details. It is sufficient to indicate the impressiveness of their dimensions to repeat that the mountains rise abruptly from the waters of the Sound to a height of a mile or a mile and a half; that the sailing passage between them is not more, in some places, than a quarter of a mile in breadth; and that in the waters below no bottom has been found at 200 fathoms deep. The details upon which the eye prefers to dwell, rather than realise these almost repelling features of the scene, are the snow-fields at the summits, the innumerable cascades which they produce, and the scattered vegetation on the mountain sides. The cascades are, perhaps, the features which communicate to the picture what it may possess of cheerfulness or charm. At every few yards they stream down the rocky mountain face, and, as we saw them, were traceable from the very patch of snow from which they emanated, a mile or more above our heads, until they reached the waters of the Sound, or were borne away in infinitesimal spray, visible only by the rainbows which they formed. Some were like mere skeins of thread, only at intervals traceable; others, like extended icicles, with their downward motion scarcely seen, and partaking of the silent, stolid aspect of the granite face over which they ran. But many danced a merry dance from "nook to crannie," and from crag to peak; were, at one point, dashed into spray; amalgamated again at a lower level; and at last threw themselves over the rocky cliff, to become only the sport of the wind, or to disappear into space. The larger ones meandered, with a milky whiteness, in a well-defined channel, among herbage and shrubbery, and with the regularity of the feed of a mill-wheel gently dropped into a mass of moss, or into a quiet blue cove. What transformations they must all undergo, when the clouds add their contents to the meltings of the snow, it is not difficult to



SPECIMENS OF WEST COAST FERNS.

conceive, and one can readily believe the stories of captains who have taken shelter here, as to the perfect deluge which comes from the hill sides in a storm, or the testimony of the Admiralty Surveyors, that, after a heavy rain, the sea was found to be covered with fresh water, several feet deep.

One of the eccentric beauties of the scene is the irregularity with which vegetation is disposed, or displayed, on the steep sides of the hills. Occasionally the cliffs are too abrupt for flora or for shrubbery to find a footing. On others they are deterred by the cold companionship of the snow-fed streams, or are ruthlessly swept away by the sudden avalanche. Elsewhere the level is too high, or the surroundings are not congenial, for the growth of any vegetation but that of the most meagre kind. But wherever a footing is to be had, there vegetation asserts itself, and, in every shade of Nature's green, clothes the white or the grey rocks of the cliffs, or surrounds the errant patches of snow which have slipped from the parent fields above, and deposited themselves in solitude, or in groups upon the mountain side, until they are again separated and slid off to a lower level, to wither away into the waters of the streams.

Throughout the length of the Sound there are only the most trifling portions of beach, usually formed by slips from the hills; and, from their appearance, it is just possible that, by the weight of half-a-dozen men, they might be removed from their pendant position, and be precipitated to the bottom, fathoms below. Several of the cliffs indicate that masses of rock, equal to hundreds of thousands of tons, have at some time become detached, and have subsided into the sea; yet, at these very places, the soundings show one hundred and eighty fathoms, and no bottom.

At the upper extremity of the Sound there are two small circular harbours, called Fresh Water Basins, from the fact that, unless it is at high tide, the water in them is usually fresh; and in the first of these the "Geelong" anchored. She entered this strikingly picturesque place of anchorage at half-flood, the bar having then four-and-a-half fathoms of water upon it, and she dropped anchor in seven fathoms. It is a tiny harbour, just about capable of holding three such vessels as the "Geelong;" but its surroundings are stupendous.

One of the objects nearest to our anchorage, and one of the most attractive in the Sound, except its own grand physical features, is a waterfall of considerable proportions, and 540 ft. high. It is a waterfall which would, no doubt, look immense in any but its situation, for there nothing short of a Niagara would accord, in dimensions, with all that is within view; in fact, the only grumble we heard on the voyage was that, because there was no Niagara, Milford Sound was incomplete. While the practical section of the party betook themselves to one destination, a few of us first took a look at the waterfall. Landing at a spot where a magnificent birch-tree stands upon the beach, and scrambling through a patch of shrubbery, we reached the grass plot in front of the fall, and which is known as Cemetery Point—not, apparently, because any one is buried there, but because the rank grass is so strangely marked by its various colouring, as to assume all the appearance of covering a series of graves. The stream leaps from a

terrace covered with the dark-leaved birch, and there was a considerable fall of water when we were there, but the jagged rocks upon which it fell drove it into spray, and by the concussion, this was driven horizontally from the foot of the fall, until it reached almost half-way across the Sound. So powerful and constant is the passage of air so formed, that no vegetation stands before it, but grass and the smaller plants; it was quite enough for a man to do to maintain the perpendicular. The stream which it forms rushes into the Sound, over a rough rocky bottom of a peculiar azure tint; and, judging by the boulders on either side, it must occasionally assume dimensions with which those who desiderated a Niagara might well be satisfied.

MARTIN'S BAY.

CHAPTER IV.

THERE are a few memoranda—the shreds and patches of one's recollections of Milford Sound—which must be disposed of before reference is made to the agreeable, and, it should be added, the practicable surroundings of Martin's Bay. Those of us who had gone to gaze upon the waterfall, when satiated with the sight of it, crossed to the southern side of the basin in which the "Geelong" lay, and joined the others upon the delta formed by the outflow of the two rivers which fall into the Sound—the Arthur and the Cleddow. It was a trifling matter, but of the first objects which attracted our attention were some extraordinary footprints on the sandy beach. "Would that they were only the footprints of the Moa," was the wish of the Barnum of the party, who would, no doubt, have dug them out, as proof-presumptive of the existence of the mysterious bird; but, unfortunately, they bore a striking resemblance to the marks which are made by the hoofs of a horse, only that they were of mammoth size. It was suggested that some poet who had come hither in search of the picturesque had here mounted his Pegasus, and that these were its footmarks as he took his last flight. The practical man had nothing better to say than that they were the marks of the "flippers" of a seal, and it is just possible that he was right. I do not believe he knew anything about it; but there was none of us competent to contradict him.

By the time we had a good look around this locality, waiting for those who had gone further and were faring worse, the eye became more accustomed to the grandeur of the scenery, and we could contemplate it with less of that shrinking, shuddering feeling, which instinctively overcame one when in closer proximity to the mountains, and in a position to realise more acutely their magnificent presence. This may sound extravagant, but there were some among us who were destitute of neither nerve nor pluck, and if I misrepresent the quality of their feelings in the presence of the surroundings of Milford Sound, they are quite at liberty to say so. My impression is that the opportunity was an excellent one for Superintendents or any one else realising their individuality, and ascertaining the relative proportions of themselves and the world at large. What I was saying was, that we could now look upon the scene more calmly. Yet it had not lost any of its elements of grandeur. There were mountains to the right, mountains to the left, mountains in front, mountains behind—I should not like to say where there were not mountains, for there were some of them almost above, overhanging with an attitude of impending vengeance which was almost as useful as going to confession. One of the quaintest forms was the peculiarly-peaked summit of the Mitre,

standing to the westward, and sloping on the one side into the Sound, and on the other into a deep barren ravine, where the snow had slid to a level unusually low. The most attractive—and the one upon which the mind would dwell the longest, if the eye were only equal to the task—was Pembroke Peak itself, covered with a constant coating of snow, so brilliant under the mid-day sun as to dazzle the sight. From the snow-field near its summit there was an extensive slip, or glacier, if you like, which came down to a lower level than, with the intervening bush, we were capable of seeing. From the placid water in which the "Geelong" had anchored, and almost parallel with her funnel, a hill stood up more than 5000 ft. high.

Once or twice a dull rumbling sound was heard, like that of distant thunder, and we thought our hopes of a continuance of fine weather were to be disappointed. But the cause of the sound was discovered when it was repeated, for, before it reached our ears, some of us happened to notice the snow on one of the mountain-tops slipping from its place, and coming down the side with a velocity that made one wink again, until it settled on a broad terrace, and sent up a huge cloud of snowy spray. The sound produced by one of these, mistaken for the echo of the firing of the steamer's gun, brought back Mr Wright and others who had gone up the river; and, as our time was up, we started to return to the anchorage of Anita Bay. Before doing so, we landed some of the Acclimatisation Society's rabbits on the level ground between the rivers, with good wishes towards them and their multiplication; and it took us some time to pick up the anchor, for it had embraced a snag at the bottom of the Basin—a stout black pine, apparently recently deposited by the stream. We neglected to do one thing—to add a small record of our visit to the few other records carved on trees near Cemetery Point, or scratched on superannuated soup-and-bouilli tins, fixed at the same place.

As we steamed down the Sound, we could not but observe Harrison's Cove as presenting an opening in the country towards Martin's Bay; and I have ascertained, from those who visited Little Martin's Bay (or Kaipo Bay of the map), that a valley extends from that place towards Milford Sound, with its probable termination at Harrison's Cove. But Harrison's Cove, or any other part of Milford Sound, I fear, is never very likely to become a harbour for loading and discharging shipping; although, perhaps, in the "high-faluting" mood in which one comes away from its scenery, it is scarcely safe to hazard that opinion. In the humour in which one writes, it would almost seem sacrilege for anything less than the "Great Eastern" to enter there.

It was almost dusk before the "Geelong" anchored in Anita Bay. This bay, though recognised as part of the Sound, is properly outside—the ante-room of its grand interior. The land which forms its shelter is a comparatively low peninsula, the outer projection of which is named Ann's Point. The bay is a favourite anchorage with vessels running along the coast, when caught in a S.W. gale; but there must occasionally be a considerable "range" of sea, even within its shelter, the beach being steep. Its shelter would, apparently, be most deficient in a N.W. wind, but the Sound itself is not a bad, rather a better, substitute. The bay is well marked by a small island, or shrub clad

rock at its outer extremity; and to this pinnacle we made one of our warps fast, while the other was passed ashore. We did not anchor, the soundings being rather deep, but it would have been well if we had done so, for, during the night, by some negligence of the watch, the steamer was allowed to drift shoreward before notice was given, and she grazed upon the rocks—not the most agreeable sensation, with the knowledge that there are ten or twenty fathoms of water close at hand—before steam was up, and Captain Hart was able to proceed to sea. In the evening, and before this happened, there was an eager rush on shore, for the possession of greenstone, which this beach has deservedly the credit of producing. Some came on board with their pockets full; others grumbling at their ill-luck. The greenstone, so far as we found it, is about the smallest of the shingle, and, although it is obtained readily enough, it is advisable for one to keep what he gets to himself, and not give it to his neighbour, as he may do so, and then search for the next two hours to discover that there is nothing green to be seen, except in his own organs of vision.

Next morning we were close to Martin's Bay. In fact, we were rather past it, when we steamed in closely towards the shore and entered Big Bay instead. The outline of the land was not readily distinguishable, in consequence of a thick haze which overhung it, except to the southward, where the long lines of the snow-capped peaks, which form the surroundings of Milford Sound, were seen clear and sharp against the morning sky.

It is necessary that I should here introduce a diversion from the narrative of the proceedings of those on board the "Geelong." This expedition had partly been undertaken in the knowledge, or in the belief, that there were some miners in Martin's Bay, who had obtained gold, but who were without the absolute necessaries of life. There were only traces of miners having been in the neighbourhood when we landed; but it has since transpired that they were there even until a day or two before the "Geelong" arrived, and as the result of their sojourn on this part of the coast has been communicated to me by their companion and storekeeper, Mr R. Cleave, of Invercargill, it may be well to give his statement. We were not aware of the circumstances until after the return of the "Geelong" to Dunedin, Mr Cleave having arrived nearly about the same time; but his information communicates a complexion to the resources of the Martin's Bay district which it is well to know, and it explains what were to us, at the time of our visit, merely matters of suggestion.

Mr Cleave states that, on the collapse of the diggings at the Haast, a party of eleven men, of whom he was one, proceeded to Big Bay. They arrived there about the end of June, this year, and it was determined by them to prospect the coast to the southward of Martin's Bay, thinking it not worth their time to try the country north of the Awarua, as they were not informed of any one having previously obtained there any indications of gold. They were three weeks detained on shore, in consequence of severe weather, but, at the end of that time, they started in their whale-boat for the beaches to the southward of Martin's Bay. The weather continued unfavourable, and, being unable to

land, they ran for Milford Sound. For five weeks they were in and out of their shelter, endeavouring to beach their boat, but the weather continued unfavourable, and they were unable to do so. At length they managed to beach the boat, but in doing so they stove in three planks, and all their provisions were drenched with sea-water. The point at which they effected a landing was eight or nine miles southward of Martin's Bay. A few days afterwards, four of the party with a week's provisions, started to prospect the beaches towards Milford Sound; but on that occasion they found no gold in payable quantities. Four miles from where they landed, however, they found gold on the beach, and it was backed by sandy terraces which they intended to prospect; but the provisions they had with them did not enable them to remain, and they returned. As the general stock of provisions for the party began to run short, they tried to launch the boat, to proceed to Big Bay; but she again got stove. While thus detained, they found indications of gold immediately to the northward of the place where the boat lay; but there was no quantity of wash. Starting for Big Bay by the beaches, they returned with provisions and two men to assist in the launching of their boat; and, on their return, they prospected further into the terraces where they had previously got indications of gold, and there they obtained payable prospects. Getting the boat launched and despatched for provisions, they remained there and commenced to bring in a race, as they had succeeded in obtaining 4 ozs. of gold, washed out in a gin-case, during two days' work. On the completion of the party, by the return of the boat from Big Bay, they finished the race, occupying three or four weeks in that part of their work, and, after it was finished, they worked for other three weeks. In that time they obtained 3 lbs. 2 ozs. of gold, and it then ran out. They had also exhausted all their provisions, but what was sufficient for one day. They prospected, sinking some holes four or five ft. deep in the immediate neighbourhood, but they could not remain. They re-launched the boat, returned to Big Bay, and after a fortnight's detention there, they started north. During the whole time of their stay, the weather, except for a few weeks, made prospecting impossible. It has no necessary connection with the objects of this expedition; but, to complete their history, it may just be stated that, on their way north, they landed to the southward of Jackson's Bay; that there they ascertained the circumstances of the drowning of Mr Marsden and the other man whose loss was recently recorded; that they supplied some of their stores to the family who were destitute, but who were disposed to stay there if they could only get provisions; and that they were subsequently picked up by the steamer "Kennedy" which had been despatched with relief to these people, and by her were brought on to Hokitika.

During the time that this party were prospecting to the southward of Martin's Bay, another party of five were at work to the northward of Big Bay, and are understood to have had some good claims. Mr Cleave was also informed that they had other prospects which might induce them to return, and it is believed they had gone back overland to Big Bay. During their stay in the neighbourhood, this party had ascended to the head

of Lake M'Kerrow, and there, on the day on which we landed, we found some remnants of stores which they had left.

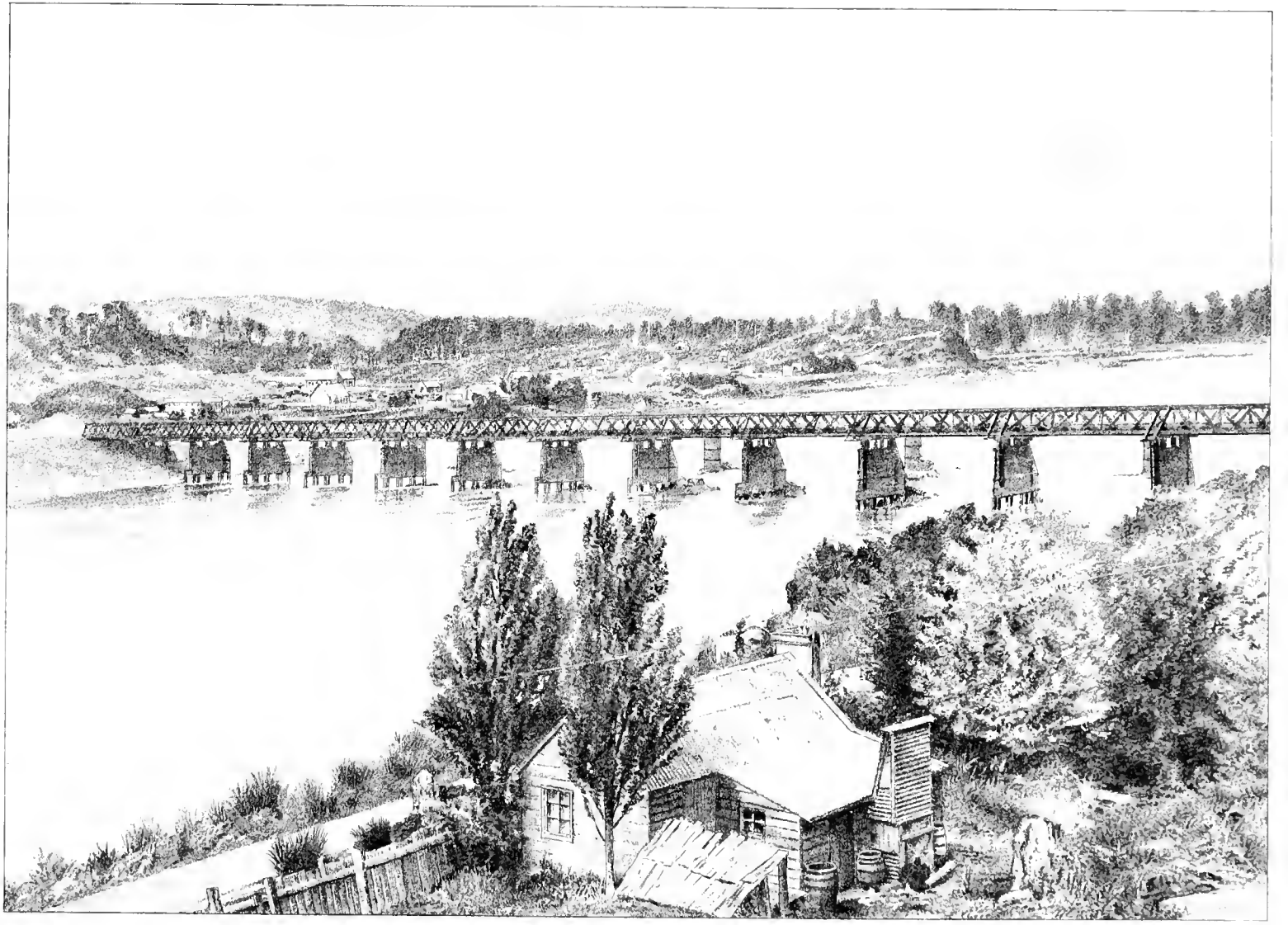
There was a wholesome and habitable look about the country in the vicinity of Martin's and Big Bay's, which was, to us, quite refreshing after the fatigue our sense of sight had undergone in gazing at the mountains which form almost the sole feature of the scenery further south. It is true that a somewhat deceptive haze hung over parts of the land; but there was enough visible, and there was plenty visible afterwards, to show that there was here a considerable stretch—many thousands of acres—of available country. Not country available, considered from a sheep-breeding, cattle-rearing, point of view, but country a great deal more available, and with an infinitely superior climate, to anything that the Pilgrim Fathers of the New England States, or the settlers of the Canadas ever realised; and these are not bad samples of colonies. For a timbered country it is also, by the qualities of its timber, and the comparatively open character of its bush, evidently superior to many of those parts of the West Coast which the discovery of gold has already populated; and, without getting excited over it, the venture may be made of saying that, while it is quite equal, in merits of its own, to other, and nominally greater, places on the East Coast, it has only to be attached to interior territory, if that is possible, when those greater places would have one other place to compare with them. Wellington, without the Wairarapa, would not be "a patch upon it." Nelson, without its Wairau, would be as pretty, but no better. The matter to be solved is the possibility of its connection with an incomparably superior place of either of these—the Lake District of the Province of Otago. Those who ought to be some authority on the subject say that the establishment of such a connection is possible, and a considerable number of degrees within the barely possible. It is not a necessary sequence that, in the event of such communication being established, Martin's Bay should become the outlet for the produce of that district, or the sole inlet of its supplies. But, connected, the one would re-act upon the other, and both would thrive the better in consequence of the connection. The deficiency of the place is its harbour; but even that deficiency is less in degree than is the deficiency of such harbours as the Hokitika or the Grey; and there is the most abundant shelter not far distant, while inside its bar there are facilities for inland communication for twenty-five miles for any steamer capable of entering the river. Of course it is a very important consideration, in comparing it with Hokitika, that there has not been discovered in its neighbourhood an extensive goldfield; but gold has been found, and in payable quantity, which, according to the West Coast estimate, and in such situations, is not a small one. It is the comment of those who have got gold there that it is not worth a man's while to work for two or three pounds a week, when he has to bring his provisions to himself in a whaleboat hundreds of miles, and to take the chances of being cast upon the beach with nothing to chew but the cud of repentance. What is required, they say, is communication and the presence of a community.

Big Bay, which we first entered, misled by the haze along the shore, although it appears on the chart as a mere indentation of the coast-line, compared with the

magnificent harbours to the southward, is a fine crescent bay of considerable depth, and with a long-extending shelter on its north side, consisting of a line of table land, terminating in a low spit and a reef of rocks. It is possible for a mistake to be made as to the identity of the two bays, going by the chart of the mere coast-line; but Big Bay is distinguished by a low conical peak inland, and by its greater depth. Martin's Bay has also its conical peak, but further inland.

A circumstance involved in the entering of Big Bay was the loss of high water on the bar of the Hollyford, but when we got abreast of it, the tide was still running in. In fact it usually does so for an hour or so after high water, in several of the rivers and lagoons of the West Coast, though the tide may have fallen on the shore. Captain Thomson was in the rigging for the purpose of informing us as to the appearances. He considered the entrance to be well defined, and straight, with the dangers sufficiently visible, or well ascertained to be avoided, and that there is breadth and depth enough of water for such vessels as the "Geelong." Of course, the conditions are much more favourable for steamers than for sailing vessels, and apparently, there are few rivers, if any, on the West Coast into which steamers like the "Bruce" and "Kennedy" could enter under such favourable conditions, as, on the average, they would be able to do here. With a S.W. wind there is probably a heavy sea on the bar, but with winds with a northerly point in them, there should be considerable shelter afforded by the high bluff land which forms the northern shore of the entrance. A sailing vessel would have difficulty in getting in without a leading wind from the southward, but a light breeze would probably be sufficient; although there is a heavy body of water in the river, it does not flow with such impetuosity into the sea as to make much debatable ground between it and the tide. The natural effect of the existence of the Lake must be to reserve the water for a time on the occasions of storms, and to feed the river more gradually than if it flowed directly from among the hills. The holding-ground in the bay is apparently good. The "Geelong" anchored in five fathoms, or four and a-half fathoms at low water, and during the three days she lay there, with a considerable breeze blowing for part of the time, the anchor never seemed to have moved.

The landing was effected in the three boats which accompanied the steamer. To the digging party, who had rejoined us at Milford Sound, one was devoted. In the other, the Superintendent, the Secretary for Lands and Works, and the Surveyor, had seats, and as much work as they were pleased to undertake, in conjunction with the other passengers; and it was a satisfactory characteristic of the three days' stay on shore, that there was a very large amount of willingness of spirit, and infinitesimal indications of weakness of flesh. The third boat remained for the use of those on board the steamer, and, while we were "girding our loins" for the exercise that was before us, her crew found exercise for themselves in picking up some hundreds—positively bucketsful—of the eggs of the sea-swallow, which the innocent bird deposits in little holes in the sand, and occasionally in localities not free from the incursions of the surf.



KANIERI BRIDGE

The circumstances were favourable for proceeding at once to the head of Lake M'Kerrow. That is to say, the wind was blowing freshly from the northward, and we took advantage of it rather than linger to examine the extent and quality of the level country on either side of the stream; but it is an advantage which can apparently be had eight days out of ten, for the beaches of the lake would indicate that the wind blows more frequently, or more fiercely, from the north and west, than from other directions, and it is a recognised feature of the meteorology of the coast that the wind during the day, draws up from seaward through the Sounds. For instance, on the day we entered Milford Sound, there was but a very slight sea-breeze outside—almost a dead calm—yet it blew up the Sound with a freshness equal to a considerable percentage of the steaming powers of the "Geelong." The lower part of the river is something similar in its extent, its curve, and the character of its banks, to the Matau branch of the river Clutha; and, as we ascertained on the return journey, there are other particulars in which the "straths" of the Hollyford may lay claim to a resemblance to Kaitangata and the Clutha island. The water was comparatively clear, such *débris* as the detrition of the hills may supply finding its way into the lake, which, from its depth, is a reservoir of no small capacity. On quitting the narrow vista formed by the banks of the river, and on entering the lake, a better conception can be formed of the level country which intervenes between it and the sea, and which the river intersects. I think Dr Hector estimates the extent of that piece of country at 4000 acres, but that estimate—and it is an under-estimate, if anything—does not include the river flats a few miles distant in Kaipo Bay, nor any of the level country contiguous to Big Bay, and which is apparently approachable from this, the lower end of the lake. It is not safe to hazard an unprofessional opinion, but these districts together—and they are scarcely distinct—cannot contain less than 15,000 or 20,000 acres—timbered of course, but level, and, after the process of clearing, arable. A feature of this end of the lake is its pleasant, white, gravelly beach—a beach which, on the east side, seems to extend nearly to the head of its waters. On the west side the ranges are steeper, though there is no great room for comparison; and cliffs bearing vegetation to the water's edge, stand abruptly out of the lake, as they do, in nearly all cases, in the Sounds. There was an assumption, but it could only be an assumption—for there is no authority for it—that there was level ground along each side of the lake, almost to its head. Instead of that, except at its seaward end, and for the area described, its banks slope at too great an angle to make the cultivation of the ground possible, even when cleared, save in a few detached spots. The average height of the ranges on either side is from 2000 to 3000 ft.; and towards the headwaters, they are either the spurs or sides of ranges, which rise to nearly double that height and are snow-clad. Indeed, by these details, the lake, as a whole, resembles very much some of the Sounds which present some of the more subdued types of the peculiar scenery of the Otagan portion of the West Coast. It is, in many essential characteristics a Sound, but a Sound which has at some period been separated from the sea by a convulsion within the grand convulsions which have given character to this coast; or if

convulsions are not an admissable expedient, as they too often are by geologists, when comprehensible causes cannot be suggested, it is a Sound which has been cut off from the sea by the waste of the hills, that waste forming the country which now interested us. To be candid, we had had quite enough of the scenery which its upper end presents, and were charmed with the scenery of its seaward end—at first, because superficially, it presents such a contrast to that to which the eye had been accustomed for a number of days; and afterwards because it was seen to have substantial merits, when examined with a regard to the matter of pounds, shillings, and pence.

LAKE M'KERROW.

CHAPTER V.

THE party who had left the "Geelong," and had crossed the Hollyford (or Kaduku) bar, described as sailing up towards the head-waters of Lake M'Kerrow (or Kakapo). The two names of the places are given, because the first is the name fixed by the map: the second is that in most familiar use; and there are reasons for about the same amount of sympathy for one as for the other. The river flows into the lake by two channels, about half a mile distant to each other. We correctly chose the stream on the right hand, and found it quite as much as we could do, with oars and sail, to stem the current at its junction with the lake, and to get over the little "bar" caused by the strength of the breeze. Immediately inside of this, we landed at the foot of a spur, which, by the predominance of the birch-tree, by the extensive slip of rocky *débris* which its side presented, and by its snow surmountings, had rather an Alpine aspect. As we landed, our attention was attracted by an object common enough among our company, but but uncommon as a feature of the country—an old coat, hanging from a rata tree. It had evidently been left by some digging party as a signal, as in a hollow behind the tree, covered with the "fly" of a tent, was found a bagful of flour, an adze, a parcel of nails, and portions of blankets. On a tree, a few paces behind, were carved the words "J. Wallace; Jan. 3, '64;" and on another tree the words "Howden and party." It was apparent that the first inscription had no relation to the "plant" near the beach. Although acquiring a musty aspect, it had been deposited much more recently than the date indicated. Its contents had probably been left by the party whom Mr Cleave describes as having visited the head of the lake, for, near hand, there was a "mogey," or a compromise between a boat and a raft, formed of ship's planks and stems of Native flax—a primitive means of conveyance which, Mr Cleave states, the party had constructed. There were also traces of a canoe having been formed out of the trunk of a tree, by which the party had probably returned to the coast. In the vicinity there were traces of a camping place, and remnants of old boots, which had evidently done eminent service in the exploration of the country. We were puzzled by the presence on the beach of a vessel's boom or topmast, but its appearance at this distance from the sea was explainable by the remembrance that the schooner "Pride" had been wrecked at the mouth of the river, and it was possible that this relic of her had drifted hither on a solitary voyage of exploration, or, what is more likely, that it had been used by the diggers as the keel of their "mogey."

It had been ascertained, during a short stoppage on the beach at the lower end of

the lake, that we had come ashore rather indifferently supplied with provisions, in the event of any accident happening to prevent our return to the steamer. Some of the digging party, who were "shell-backs," and good hands at the oar, were therefore despatched to the vessel in the smaller boat for additional supplies, and for stores to be left for the surveyors. The remainder of the party came on to the head of the lake in our boat, and they camped at this old camping place. Others of us pulled the boat up, and, when that became impossible, tracked her to the first fork of the river; and there we also camped for the night. The camping place was picturesque enough, being in the midst of a tiny clump of shrubbery at the extreme point of the island formed by the division of the river into the two streams which fall into the lake; but it was not a very prudent choice, except upon the faith of the continuance of dry weather. It was already all but encircled by the stream, and it was evident, from the numerous large logs, and the considerable area of bare boulders in the neighbourhood on nearly the same level, that the upper part of the island—and under extraordinary circumstances, perhaps the whole of it—is occasionally overflown. The river at this point runs between ranges 3000 and 4000 ft. high, some of them rising almost precipitously from the banks of the stream, and all of them more or less snow-clad. Through openings in the ranges on the Milford Sound side, could be seen the immense snow-fields of Tutoko Peak—a mountain not less in height, if not higher than, Pembroke Peak—and we were sufficiently near it to hear, during the dead of night, the loud thunder sound of the avalanches descending its steep sides.

For a party of nine, the tent accommodation was not extensive, but it was economically dispensed; and if there was limited comfort, there was at least a picturesqueness about us befitting the fashion of things around. The comfort was not inconsiderable, but it was mixed. With the Superintendent and Secretary for Lands and Works acting as hewers of wood and drawers of water; with a bed of fuschias and veronicas carefully spread by the hands of the Harbour Master; with the tit-bits of pigeons shot, waded for to the waist, plucked and cooked by one's companions; with all these conditions combined, a man would surely be bold to complain. Any one who was luxuriously disposed might have walked about with his hands in his pockets; but it was just at that point that there was a failure in the completeness of things; for hath not a man ears with which to hear, and eyes with which to see, and is it likely he would submit to have them literally "bunged up" by sandflies, in exchange for all the moral satisfaction he might derive from the other circumstances by which he was surrounded? The vote was unanimously in favour of physical comfort *versus* moral satisfaction, and we lit a big fire, with a view more to the size of its smoke than its cheerful blaze; and later in the evening, we hailed the gentle dew which fell, and the clear moon which rose above the snow-peaks in the east. By their assistance we managed to get two or three hours' sleep, to be awakened by the sweet notes of the morning song of the thrush, and the irritant pricking of these same sandflies; for neither reasoning nor wrath would turn them away. It is fair to say, however, that it is not here that these pests were most

troublesome, and that a great deal depends upon the choice of one's camping place. Taken as a whole, the West Coast did not present them, at any one time, in such aggravating numbers as we found them afterwards on our visit to the Bluff, and practised bushmen are, no doubt, able to avoid their presence and their inconvenient admiration of the society of men. Fortunately there was not the additional nuisance of rats performing nocturnal steeplechases over our noses—a common enough experience on the West Coast, as elsewhere. In fact, the untouched flour left by the digging party indicated that they are enemies to domestic comfort which have not yet found their way thus far south. Natural decay was, exclusive of our appetites, more an enemy to our stock of provisions, and as the meat we had with us gave intimation of its length of absence from the slaughter-yard, the Secretary sat up later than the rest of us, to keep turning the string from which two big pieces of beef depended; and in the morning we found that, unlike King Alfred, he had been "a good and faithful servant," and that his work was "well done."

In the morning, the Secretary and Mr Wright pushed up the stream some miles further; but, it was found impossible, in consequence of the rapids, to take the heavy boat which it was necessary for us to have, any great distance up. Dr Hector had had a small boat adapted for the purpose, and his party tracked it up for some miles, conveying their "swags," but the convenience, it is confessed, was in that case doubtful. Compared with the season of the year at which Dr Hector visited the locality, there must have been a greatly larger body of water in the river. In fact, in its present trackless state, and the frequent necessity for making the river the road, the summer season must be considerably the worst for getting over the ranges to the Wakatip. The Secretary and his companion went past a large moraine, and, I suppose, nearly to the border of the limited breadth of flat country which, above it, occupies what is apparently the bed of an old lake. The drift along the banks of the stream is described as not unlike that of the Shotover. Among the shingle were picked up numerous pieces of green-stone—not the green-stone of the Maoris; and round our camp we found a few pieces of porcelain jasper. The beaches of the lake, lower down, seem to consist of granite gneiss, and disintegrated schist. Though tall trees grew here, on what may be literally described as suction—for they stand on the bare rock, without even the semblance of soil—there seems to be, on some parts of the island, some cultivatable ground, and it might hold a homestead; but rich as is its vegetation, it is hard to say how far it is guaranteed against floods. In the event of a tract being cut from the Wakatip to the M'Kerrow, this would naturally be a stopping place. Rather, it would be its western terminus; beyond it the lake provides preferable facilities for travel.

The boat which had been despatched to the steamer had not returned, and, having seen all that was apparently to be seen in this the least practicable part of the district, we started for the return trip by the lake. The diggers were all scattered, and beyond "hail," except three, and two of these came with us to take a spell at the oars in pulling down against the stiff head wind which we had to face. It was arranged that, for the

others, one of the boats should be sent back. So far, and, indeed, until the end, they did not get the "colour;" the formation was, in the mining sense, altogether too hungry-looking.

The lake seems at any time good 12 or 15 miles long; but the pulling distance, regardless of the impediment of wind, was something well above 20. The lake waters, as we saw them, were clear, and a peculiar appearance is presented on the rocky face under the surface by bright green alge or moss. This may be worth remembering, as any one having a sympathy for minerals, instead of plants, might delude himself with the hope that it might prove to be copper; and its examination is not accomplished without some risk of going down "fathoms deep." The trees along these precipitous shores are chiefly the birch and the rata, and there is a shrub which we had not previously seen, as pleasing by its appearance, though not as in fragrance, as the sweet-smelling hawthorn. As a feature of the shore, they are just a shade less observable, but not less attractive, than the scarlet tips of the branches of the rata. It would have been more pleasant to have pulled down by the eastern shore of the lake, where there is more of a beach, and where some prospecting might have been done; but, as the wind was, it was most exposed.

We were glad to land and breathe in the first little bay which presented itself in the beautiful beach which surrounds the lower end of the lake; to squat upon a patch of green sward—not grass, but the Maori tea-plant; and to solace ourselves with scraps from the "shrunk shanks" of the larder. It is at this point that the undulating beach begins, which, on this side, extends for a couple of miles towards the river, fronting the flat land which, in increasing width, reaches to the sea. The breadth of the beach indicates that the lake is occasionally 6 or 8 ft. higher than when we saw it, but, in most parts there is a terrace of nearly equal height above high-water mark; and beyond that, there is a free sandy soil, upon which fine, straight, and heavy timber grows, with no great amount of underwood. In patches, the soil is gravelly close to the surface, but that is usually where there is, at seasons, an overflow of the mountain streams. On the debatable ground between the forest and the lake, the tutu plant grew as elegant trees, usually overhung, in the back-ground, by the lighter-leaved and drooping branches of the "Kowhai." The character of the forest, and the general richness, without rankness, of the vegetation, is easily accounted for, looking at the shelter which this part of the level country, even more than that on the north side, receives from the southerly breezes by the ranges behind, and the mass of mountains towards Milford Sound.

Up to this time, the boat despatched to the steamer had not returned, and, fearing an accident, it was resolved that some should pull to the river mouth; others camp on the opposite shore, at the mouth of the Hokuri Creek, or rather river—a locality opposite us, and, from our point of view, not unlike Lower Portobello Bay. But, as we were preparing for this, the boat was seen upon the beach by the Superintendent, who had walked along the shore in advance of us, and from the crew the particulars of the

capsizing of the ship's boat on the bar, and the providential return of this boat in connection with the rescue, were ascertained. They proceeded up the lake, to bring down the diggers whom we had left. They took with them also, to be deposited in the *cache* (I believe that is the correct word) where we had already found the flour, the following stores :—Four bags of flour, one bag of sugar, one bag of salt, one side of bacon, one bag of biscuits, three pounds of candles, two bars of soap, five tins of sardines, one bag of tea, and three tins of baking-powder. Inserted in a gin-bottle, to keep company with the old coat, was the following written intimation :—"December 12, 1867.—These provisions are deposited here at the expense of the Provincial Government of Otago, for the use of surveyors. Any parties travelling, and requiring supplies, are requested to take what they require, and to leave the remainder carefully secured, for the use of any others who may be in the same position as themselves." We crossed the lake and camped for the night, near the mouth of the Hokuri Creek.

At the point where we crossed Lake M'Kerrow, from its western to its eastern shore, for the purpose of camping for the second night, its waters are about three miles in breadth. On the east side, as upon the west, there is a broad white shingle beach—a delightful promenade, much appreciated by us, who, from our cramped positions in the boat, had for days been gazing at upright hills; and not to be despised by even the most elegant lounger on the most extensive esplanade of the most fashionable or highly favoured watering-place. As we saw it, there was room for the driving of two or three four-in-hands abreast of each other; but it is occasionally limited to a narrow strip in front of the rich vegetation of the terrace; this only when the lake is unusually high, by the increase of the streams which flow into it, or—what is, no doubt, a more frequent cause—high spring tides. There was a perceptible rise and fall of the lake, in accordance with the tides, during the short time we were there; and it is stated by Dr Hector that though the great bulk of its waters are fresh, there are occasions when, near the lower end, they are distinguishably brackish. We camped near the mouth of the Hokuri creek—a considerable stream, which runs rapidly towards the lake along a valley visible for some distance along the hills in the direction of Big Bay. While some were camping, or cooking the dozen of pigeons, "rolling fat," which two of the party brought down with their guns in a very few minutes, others walked along the beach to a point denoted on the map as the site of the "Government Store," and as far as Gravel Cove—a bay of miniature size, but of much picturesqueness, where, during a part of her visit, the "Matilda Hayes" had been moored. Near where the Government Store should have been found, a pole was seen driven into the beach, surmounted by a board with the inscription, "J. Cook, March 26, 1864." Had the date been just a little less distinct, there seemed to be a remote hope of one of our party returning to Dunedin with the conviction that this was a record of the visit to these parts of none other than the celebrated Captain Cook; but a learned and eloquent disquisition upon the ancient character of the carving led to a closer examination, and to a realisation of the humble and unromantic truth, that it was simply a record of, I think, the visit of the party who

were despatched in search of Dr Hector. The Government Store, in the condition we found it was, a significant indication of the mutability of things, and of Governments. The building, nothing much at first, was already, though only two or three years old, reduced to the remnants of the frame, rotten and tottering—its floor, a shrubbery of a growth as high as what were once the walls; and around it, in admired confusion, were the relics of a few cases and casks, which had stood until "rust and moth" had corrupted them, and then collapsed. Upon a tree in Gravel Cove was nailed a piece of printed calico, with the words "Good News to the Diggers. They are come at last. Who? The Diggers' Friends!" It is just possible that the Superintendent and the Secretary for Lands and Works may have accepted this as a personal compliment, specially prepared for them, in recognition of this visit; but, if I am not mistaken, I have seen the same sort of thing about Bullen's corner, or in the windows of "The Greatest Wonder of the World." By what chance it had got here, it is hard to say. As a development of the advertising mania, the circumstance may not be without interest to those for whose genius there may be an outlet in the establishment of the first morning paper at Martin's Bay. Upon another tree at the same place were carved the words—"Kakapo Lake, Gravel Cove, 'Matilda Hayes,' Geo. Surv., Otago, Sep. 17, 1863;" and underneath these "J. Cook, A. 2, 1864."

It is in this vicinity that there are some of the choicest spots for settlement, although there are superior situations on the left hand bank of the river, when sailing down, and half-way to the sea. A small township at this end of the lake is not an improbable realisation of the future, in connection with the settlement of Martin's Bay. There is deep water close to the fine beach—occasionally close to the bush; there is a level or gently rising ground behind; and it commands the finest view of the lake. But Gravel Cove, even with the facilities for settlement or shipping, is almost too pretty a place for anything but a picturesque pendicle to some privately-owned estate. The township, if there ever be one, will probably be where there is an equal extent of practical resources, and less of the picturesque. There is no paucity of situations of either sort, but the most probable selection will be on the left hand side of the river, after crossing the bar. On the right hand side there is an extensive sandspit, quite as applicable to the purposes of a township as the site of Hokitika, but it is not required with such a choice of other and better area around.

Our camping place for this night had been chosen from a point of view which coincided with highly cultivated notions of the picturesque, but without a due regard to one of the natural features of the place—the presence of blow-flies, sand-flies, and mosquitoes. There were indications of an early downfall of rain, and the sand-flies were especially active and ruthless in their attacks. Your correspondent, with a prescience for which he gives himself great credit, had provided himself, before leaving Dunedin, with a pair of dog-skin gloves, but the others had neglected this precaution, and at tea-time, this evening, the majority appeared—and without even making apology—with their hands, instead of their feet, enclosed in their woollen socks. Taking into

consideration the circumstance that we were unprovided with knives and forks, it can easily be conceived how, with these *impedimenta*, there was, in the handling of ham-bones or legs of mutton, some difficulty experienced in paying proper attention to the usual amenities of the tea-table. One of the party was missing altogether, but he revealed his proximity by the smoke of a large bush fire which he had organised, several degrees too near the camp to be either safe or pleasant. He was just visible in the midst of its smoke, and, when gently remonstrated with for his insane behaviour, he said something like "Hang it!" and plaintively added—"This is the first five minutes' peace I have had all this day." Poor fellow!—he was much to be commiserated. He had tried salt water, and he had tried soap, and he had tried—I regret to say—some hard swearing; but all were of no avail. Here he had now burnt a good quarter-acre of scrub, and, standing, with his arms folded, in the midst of the smoke, he compared himself to Alexander the Great. He had made a desert, and he called that peace!

One of the party who had been several miles up the Hokuri Creek, brought back with him some samples of clay-slate and cement; and in the morning a number of us started to "prospect" the locality. The Hokuri is by no means such a small stream as the use of the word "creek" would imply, and it required some agility to walk up along its bed or by its steep bank of gravel wash, without getting precipitated into a hole which might necessitate swimming. About a mile and a-half up the stream we came to a cliff 200 or 300 ft. high, and from which there had been an extensive slip of soft clay-slate. This deposit underlies an older "wash" than that formed by the present stream, and it looked a likely enough bottom upon which gold might be obtained. The diggers tried a few prospects, but were unable to raise the "colour," and as it began to rain heavily, an elaborate examination was not to be expected. From the appearances, it is possible that this formation extends towards Big Bay, and it is a formation with which the diggers were better pleased, with regard to the prospects of gold, than that of any of the other localities which they had cursorily examined.

As the fine weather we had had was apparently at an end, and there was a danger of the wind setting up a sea, which might cut off the possibilities of retreating to the "Geelong," we started for the mouth of the river, leaving directions for the digging party, who were expected to return from the head of the lake, to follow at once.

As we re-entered the river at its source from the lake, we tried the depth of water from side to side, and found that there is a considerable area of bank on the western side of the lake covered with only three or four feet of water; but in the proper channel, on the east side, we could not touch the bottom with the 10-ft. boat-hook, and there was apparently ample width of channel for the passage of any vessel capable of crossing the bar at the river mouth. At this point the river is about three chains wide, and it maintains an even breadth for some distance down. The banks, more especially on the left hand side, are steep, and between 30 or 40 ft. high—too high to admit of the flats being, by any chance, flooded. On the other side there is a bank of similar gravel wash, but scarcely so elevated. At different points, on each side, some of the party landed, to

prospect as to the closeness of the bush, and the quality of the ground; and the report, in every case, was a favourable one as to the fineness of the timber, its freedom from undergrowth, and the richness of the soil. These features prevailed along the banks of what Dr Hector has named the "alleys" of the stream proper—branches of the river which once surrounded islands, but which have become "blind channels," while the islands have been converted into peninsulas. Approaching the mouth of the river, its resemblance to one or other of the branches of the Clutha was, as I think I already said, most striking. In fact, in reality as well as in appearance, the sides of the river partake very much of the character of portions of Inch Clutha or its neighbourhood; and the experiences of the settlers here would be nothing worse, if not a strong shade better than the experiences of the Otago pioneers who had made the Clutha district their home, and the garden which, in many parts, it now is.

Considerable quantities of white-bait were to be seen in the stream, as they had been in the lake, and even in the Hollyford proper; and other fish of small size were occasionally visible. The woods also were extensively inhabited by pigeons, kakas, and wood-hens, and the smaller birds, whose notes filled the air almost day and night. No man with powder and shot need be without, at least, one description of food, and the simplicity with which the wood-hens were caught made the gun not always indispensable. We failed, however, in casually meeting with any more specimens of the kiwi or the kakapo, but their capture was not essentially an item of our programme.

Based upon the appearances of the weather—for it was now raining and blowing hard—bets were made that the "Geelong" would be found to have sought the shelter of Milford Sound; but when we reached the sandspit, a few of us scampered over it, and had the gratification of seeing her looming—and rolling not a little—in the distance. She was still at her original anchorage, and, as soon as the fire we made was seen by Captain Hart, he sent the boat ashore, and we mixed crews for the pull across the bar. There was a considerable surf on the beach, but the river was quite accessible by boats; and the theory is, that going out over a bar is, at most times, the safer of the two operations. On this occasion, at any rate, we found it a matter of no difficulty. It was the intention of our party to have given a day to the examination of Big Bay, but the altered weather interfered with that arrangement. The weather and the trifling time they had to prospect were also the inducing causes of the diggers coming off to the steamer, after their first determination to remain. They have since found reason to repent of their resolution, and it is not improbable that they will yet do penance by walking thither overland.

This is the last I am to say, though it is not the last that might be said, of the West Coast and Martin's Bay. Much of what has been said has had reference to the picture which the coast presents; comparatively little, perhaps, as to the practical resources it may possess. The existence of the latter, so far as they were seen, has merely been reported upon. The mode of their development is a matter which rests with the Government. It may be suggested, however, that communication with the Lake District is a prime necessity in connection with the settlement of country at Martin's Bay.

THE FIRST OF THE RUSH.

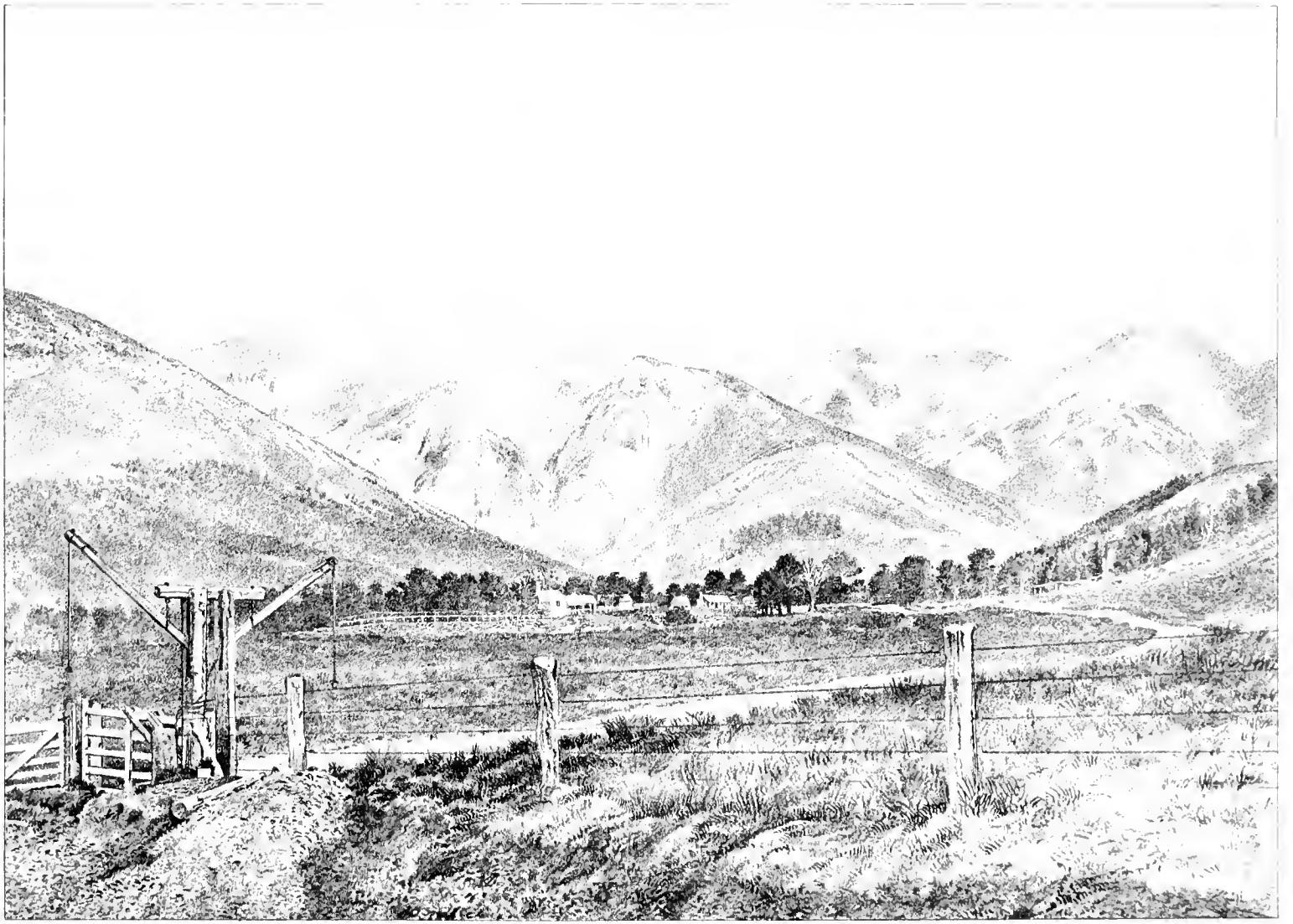
CHAPTER VI.

THE rapid rise of towns and sometimes of large cities consequent on the discovery of gold has furnished a theme for many pens and for divers comments. In many instances these centres of population wane into deserted places as quickly as they waxed crowded and noisy. They are mostly of mushroom growth, springing up, so to speak, in a night, and perishing surely and utterly when the production of that gold which caused their birth has ceased to be remmerative. Occasionally, however, goldfields towns which have sprung into existence in a phenomenally short time remain permanent centres of life and activity. Hokitika, Greymouth, Ross, Westport, and Reefton, as indeed several smaller and less known townships in the interior, are of the latter description.

To begin with Hokitika. The discovery of gold in 1865 on the West Coast first caused a large rush of people to this place. There were, during the latter part of 1864, a few stray tents, with a very limited number of residents, on the bank of this river. Beyond Walter Ramsay, the saddler, and John Hudson of the Cleveland Hotel, I do not know of any of the 1864 pioneers who are still resident in the town. It was on the 20th of December, 1864, that Captain Leech, now harbour-master in Westport, crossed the Hokitika bar with the steamship "Nelson." This date may therefore be accepted as that of the opening of Hokitika. The tidings of the gold diggings at that time were very meagre, and it was not until the first quarter of the following year that anything like a stir was made. In the month of March 1865, the place was rushed in the truest and fullest sense of the term. Early in April, the steamship "Alhambra" was despatched from Dunedin to Hokitika, crowded with passengers, amongst whom was the same special correspondent of the *Otago Daily Times*, to whom reference was made in the preceding chapter upon the West Coast Sounds. The rich finds on the West Coast soon began to be spoken of in Otago and Canterbury. In a few months, hundreds, ay, thousands, from here, and subsequently from all parts of the Australasian Colonies, found their way thither by land and sea. Many adventurous men, before the road from Christchurch to Hokitika was formed, faced the difficulties and dangers of a long journey through a dense bush, over the great range which runs along the South Island, and across many rapid and dangerous streams and rivers. In Otago and Canterbury much excitement was caused by the news that gold had been found, and curious eyes scanned the maps to discover the exact position of the "Okitiki" river as it was then called. In the early days of the field from 1865 and for several years afterwards Westland formed

a portion of Canterbury. Consequently some activity was shown by the Provincial Government in making a road and in otherwise providing for the great rush which was about to set in. The arrangements of the Provincial authorities were, however, deficient. The discovery of a goldfield within the limits of their jurisdiction was an unexpected and novel event, and therefore, with perhaps the best intentions and an eye to future revenue, they could scarcely have been expected to grapple with the situation. In one notable instance, a ludicrous and expensive blunder was committed. Fired with the news of the large finds of gold, of rapid increase of population, of the sudden up-springing of Hokitika, the Christchurch authorities determined to emulate Victoria in providing a gold waggon shot-proof, and a posse of mounted constables to escort the probable tons of gold which would be sent along from Hokitika to Christchurch over the Alpine range by way of the newly constructed road. This idea may have emanated from the brain of Mr Sherman, then Commissioner of Police, an old Victorian police officer, or perhaps from some sanguine official ignorant of the facts of the case. At any rate it was seized on with avidity in Christchurch, and carried into effect promptly. Carriage builders, blacksmiths, saddlers, and other tradesmen were soon hard at work. Waggons impervious to shot, defiant of bushrangers, were built. A troop of smart young fellows, under Mr Inspector James, were sworn in as escort constables, and a number of excellent horses purchased. An experienced Jehu named Chamberlain was engaged. Stables along the road were erected at intervals, at each of which was stationed a constable-groom. The escort started one fine day from Christchurch and arrived safely at Hokitika, 147 miles away, but alas only to find Hokitika intensely amused at this provincial *fiasco*. One solitary pennyweight of gold was all the precious metal which this expensive escort took back to the City of the Plains, the explanation being simply that all the gold was exported seaward.

But before this time, Hokitika was a considerable town. Along a sand-bank on the north side of the Hokitika river, running parallel with the sea, a long straggling street had sprung up as if by magic. Sections of ground changed hands at high prices, the right to peg out one being afforded by the purchase of a business licence. Many persons cleared large sums by speculating in sections. The main street was called Revell Street, so named after Mr Revell, who came over with the Canterbury police, and was subsequently Resident Magistrate and Warden at Greymouth and Westport. On each side of this street were temporary erections, some of timber, some of canvas. Nearly every other one of these canvas or wooden tenements was dignified with the name of hotel. The usual features of a big rush were visible. Drinking, fighting, gambling, all the means resorted to by those who got their money easily in the first flush of a new goldfield, were conspicuous by their presence. Many of the hotelkeepers at this time must have literally coined money. The Empire Hotel, which is now a large and comfortable hostelry, under the management of Mr Churches, was, at the time referred to, under charge of Mr Osborne, and consisted merely of a bar, to which was speedily added a billiard-room. The amount of money taken over that bar was surprising.



CASTLEHILL STATION — WEST COAST ROAD

Many stories have been told of the extravagance of diggers on the early goldfields of Victoria. We have heard of "Champagne Charleys" by the score, and have seen some of them. But we question if there were many better opportunities in goldfields' history of making a small "pile" quickly, than was afforded in the "shilling nobbler" days of Hokitika. General pool, at a pound each, with five shillings "a life," was a nightly occurrence amongst dozens of the lovers of the green cloth. Prepayment of three shillings for the use of a blanket on the floor or dining table, with half-a-dozen fellows gambling at your feet or head the whole night through, and disturbing your slumbers by going "five pounds better" every five minutes, was by no means an uncommon incident. A large theatre, now known as the Duke of Edinburgh, was built, and it was opened every night to crammed houses at high prices. There was a large police force stationed in Hokitika, and, truth to say, the force was wanted. The scum of the colonies, attracted by the news of wonderful and rapid "piles" made on the hitherto unknown West Coast of New Zealand, poured into Hokitika side by side with the honest and adventurous digger-pioneer, the speculative dealer, and the wandering billet-seeker. Thus it came about that in the early days, Hokitika was sadly put to it, to cope with her criminal population. In the Police Camp, situated where now stands the Town Hall, was gathered a mass of humanity. Mr Sale—King Sale, the Canterbury Commissioner—the Warden, the Police Inspector, with his force of thirty men, some forty prisoners waiting trial, were all congregated in the hive known as the Camp. There was no gaol then, only a lock-up. Prisoners committed had to be escorted over the range to Canterbury for trial. The place indeed out-grew itself. The authorities could not grapple with the wonderful flow of population. Gradually, however, matters grew more settled. An Improvement Committee, which did good work in the very early days, gave place to the Borough of Hokitika, of which Mr Bonar (now the Hon. J. A. Bonar, M.L.C.) was the first Mayor elected by the Council. He was succeeded by Mr Shaw, then proprietor of the *West Coast Times*, who was elected by the ratepayers. Streets, which up to this were simply quagmires, were formed. The township extended rapidly into the bush, the more rapidly as many of the original residents, who had neglected the biblical advice not to build upon the sand, had to lament the destruction of their tenements by the waves of the Pacific Ocean. Let me here recall to view one of the pictures to be met with on the beach in those days. A stranger visiting Hokitika for the first time, and not previously apprised of the unenviable notoriety which the port had gained for itself since the West Coast was rushed, would be struck with astonishment at the multitude of wrecks and remains of wrecks with which the beach was covered. From the entrance to the river to where the "Montezuma" had been cast high and dry on the sands, the picture was one that could not be equalled in the Colony, and perhaps not in the world. In one spot the last remnants of the "Oak" might be observed; further on, a confused mass of ruin, a heap of splintered planks and ribs, marked the place where the "Sir Francis Drake" and the "Rosella" finally succumbed to the force of the waves. Yonder could be seen the

masts of the "Titania;" and nearer home, what was left of the "New Zealand" supplied us with a painful reminder of the dangers of Hokitika. Everywhere from the water's edge to the top of the spit were scattered portions of the luckless vessels which had gone to pieces. Masts, chains, anchors, standing rigging, windlasses, might all be found, and a sprinkling of old iron sufficient, if it were worked, to give material for a good sized steamer. Never before was such a gloomy sight seen in New Zealand. A year or two before, the Bluff Harbour had the worst reputation of any place on the coast. Captains and shippers had a dread of going there, and insurance companies raised their rates on goods consigned thitherward; but the Bluff Harbour was, at the time I am referring to, a Milford Haven compared to Hokitika. A carefully prepared estimate of the loss occasioned by the wrecks of the year 1865 at this port would have told a curious tale. The value of the ships alone must have been no trifle, but, added to the value of the goods destroyed and damaged, the sum total would probably not be written under hundreds of thousands of pounds.

It was no unusual thing in those days to see 500 or 600 passengers land from the decks of the steamers "Yarra" and "Bruce." I recollect one morning the "Alhambra" bringing 300 to 400 passengers, the "Egmont" about the same number, and the "Barwon" from 200 to 300 from Melbourne. Next day the "Gothenburg" showed up crowded with passengers, the "Auckland" landed a couple of hundred from Manukau, and a steamer from Sydney came up at the same time with a full complement. Those were the palmy days for the shipping trade.

The news from the various diggings around Hokitika was of the most exciting character, for the first year or two after the goldfields were rushed. It was no unusual thing to have reported that a new lead had been struck at Waimea, yielding fabulous returns; that from 1 dwt. to 2 dwts. to the dish was being obtained with ease in several claims at the Kanieri; that £15 per man per week was being got at Woodstock; that from £6 to £30 per man was obtained at Tucker Flat, and so forth. Any one to read the mining reports of the *West Coast Times* in the months of June, July, and August 1865, nowadays, will not be surprised that about 15,000 people were, within a few months, induced to congregate on the West Coast. Such paragraphs as "Inglis and party have been making from £15 to £20 per man per week, also Hamond's and Graham's parties are doing about the same, and these are not considered the pile claims, but good steady wages ones," were by no means unusual in a mining report in these times. There were scores of miners, I will venture to say, who, in the latter part of that year made very handsome competences, ranging from £1000 to £2000 each, and this was frequently accomplished with the most primitive appliances.

Early in August of the same year there was a stampede to the Totara district, to what was first known as Jones's diggings. Here the general run of prospects was reported to range from ½ dwt. to 3 dwts. to the dish. The first mining report published of this locality stated that about 250 men had reached the ground, and it enumerated a few washings which had taken place on that day in sight of the reporter, as follows:—

"Craig's party washed 7 ozs., the result of their first five hours' work. Charley Riley's party got 4½ ozs. in two hours. Bill Friend's party have just bottomed on 1½ dwts. to the dish. No sawyers here. Miners must make boxes as best they can." About the same time the average wages obtained by miners at German and Maori Gullies in the same district were reported as averaging £10 to £15 per man per week.

The Grey rush was just then setting in, and Surveyor Rochfort was despatched to lay off a town, and survey the same into allotments for settlement. The mining intelligence from this quarter created the wildest excitement imaginable, and hundreds were on a fresh stampede northwards. Sites in the new town were speedily being covered with temporary buildings of calico or timber. Timber and iron were in great request, and for a time there was not 100 ft. of sawn timber to be obtained for any money. As high as 60s. per 100 ft. could have been obtained for a cargo, were it on the spot about the end of July 1865. Provisions became very scarce for a time, both in Greymouth and at the Twelve Mile diggings, the carriage between the two places being £20 per ton. The town dealers had run out of several articles, kerosene among the number; and candles were selling at 1s. each. Flour for a time was also very scarce on the diggings, and was selling at £130 to £150 per ton. At some of the distant places a 50 lb. bag of flour has been known to fetch £4, 10s. to £5. It was currently reported, and I believe without exaggeration, that many claims in Maori Gully and Red Jack's were yielding their lucky owners a pound weight of gold per day, with a large area of ground to wash for a considerable time. Two gold-buyers, or bankers, representing the Bank of New Zealand and Bank of New South Wales, had paid these localities two or three visits, and on each occasion had purchased from 800 to 1000 ozs. each. In the middle of August the Bank of New Zealand opened a branch at Greymouth. The price of sections in the new town ran up rapidly, and as high as £12 per foot was given for one or two frontages to Mawhera Quay for the bare sections, and these too with a considerable annual rental, the title being leasehold from the Maoris.

The Okarito rush is the next to which I will ask my readers to accompany me. We started from Hokitika by the steamer "Bruce," on either her first or second trip to that reported *El Dorado*. Having had the good luck to clear a round hundred pounds or two on Greymouth sections, I expressed my intention to my friend, Mr Robert Harrold, then manager of the Union Bank at Hokitika, of paying a visit to Okarito, whereupon he suggested that as no gold-buyer had yet paid that part a visit, I might pay my expenses in this way, while taking stock of the prospects of the district. Starting with £1000 in notes and not telling any one my mission, I made straight, after landing, to the heart of the diggings, the Five Mile, where I found no difficulty in meeting with a couple of customers for my bank notes, in exchange for which I received their gold dust at £3, 10s. and £3 10s. 6d. per oz. Before leaving the township I secured a section—an excellent one at the time—for £45, which was considered a high price. Returning and disposing of my gold at 2s. 6d. per oz. profit, and knowing that there were hundreds of ounces more waiting a purchaser, I at once decided on taking a second trip, and provided myself

this time with a double allowance of cash entrusted me by the bank. An incident is here worth relating, as showing how fortunate some of the miners were in these early days on the Five Mile Beach at Okarito. I accosted a party of four who were paddocking goodly looking wash, by asking them if they had any gold to sell. They simultaneously dropped their shovels, and after consulting together, one of the party inquired, "How much money have you, mate?" Thinking I was possessed of enough to buy any single parcel of gold on the field, I replied:—"As much as you require." But in this I was mistaken, for on reaching their tent I was presented with a couple of "billies," both nearly brim full of the finest gold dust, which they told me was the result of six weeks' work. When it was weighed I found I was a hundred pounds or two short of the amount required to purchase the lot. This story I told to George Harper, the purser of the steamer "Bruce," and you may be sure he made the most of it, in the interests of Mr Greer, the owner of the steamer. The story soon appeared in the *West Coast Times*, and the least the owners of the boat might have done was to have presented me with a free passage on my next trip, in place of charging the excessive passage rate then current of £5 for twelve hours' steaming; as the paragraph was doubtless the means of creating a crowded passenger list, including one or two bankers, who went down to open agencies at Okarito. And a right roaring trade in gold-buying they subsequently did. Having cleaned the second parcel of gold better than the first, I made a proposition to Mr Harrold to have it melted, in order to obtain a higher price, to which he assented. Straight to Mr Proctor's I went. He had started as gold-melter on the west side of Revell Street. But in this establishment I gained a new experience to anything I had before witnessed in Melbourne or Dunedin in company with the gold-melters. The gold was divided into three pots, two of which broke in the process of melting, the precious metal flowing all over the bottom of the furnace. The best was made of the misfortune, and the valuable and invaluable ingredients of the furnace—the gold and ashes—were gathered up, pounded in the mortar, and re-melted. Upon handing it to the bank, to my great astonishment and disgust, I received a purchase ticket, which showed a loss of about £25 on my purchase. To think that I had taken all this trouble and risk, of wandering to Okarito and back; that I had made a satisfactory purchase and sale; and that the gold should lose ten per cent. in melting. It was nonsense! "I have not had fair play with this gold," I remarked to the bank manager: "You should allow me 6d. an ounce extra to make up my loss." After a little hesitation, and explanation about exceeding instructions, he agreed to make the extra allowance. Just at that moment in came Mr Proctor's son, who acquainted us that his father had found a piece of gold between the bricks of the furnace. We hurried over, and to my great delight, a lump of melted gold, the size of my hand, was produced and handed me, which completely turned the scale, making my trip one of profit, instead of loss. I may add that I held the canny banker to his extra "saxpences," which he paid under protest.

Any one who had the good fortune to get a claim on the Five Mile Beach at Okarito in the end of 1865, or in January or February 1866, was safe for a "rich patch." The

returns met with in some instances were positively fabulous, and it is not to be wondered that some of the diggers, who perhaps had toiled for years previously for mere "tucker," were so startled at their luck on this beach, that they gave way at times to the wildest extravagance and riot. The steamer "Bruce" was bringing up to Hokitika 3000 to 4000 ozs. of gold every other trip, and I knew one party of four miners who forwarded 1000 ozs. on their own account. Such a heavy parcel amongst four men is something astonishing, and the natural conclusion surely is, that the heavier gold must be distributed inland from these golden beaches with no niggard hand, and will be discovered some day, when better facilities are afforded for prospecting. Prices of sections in the town of Okarito increased in value seven-fold in the course of a few weeks, but as soon as the southern beaches were worked, which took about six or nine months, prices as speedily fell, and the population gradually but surely diminished to a very limited number indeed.

The Bruce Bay, Gillespie's Beach, and the Haast rushes followed in quick order after Okarito. The wild-goose chase to Bruce Bay, led on by the memorable Hunt, will not be forgotten by those who were induced to follow his footsteps. On the Haast Beach, between the rivers Haast and Okura, a few fairly payable claims were worked, and at one time there was a considerable stir in the temporarily formed township on the southern bank of the Haast, but it was one of the mushroom townships, which lasted for a few weeks or months and then utterly collapsed.

Before leaving the southern part of the Coast, to review the doings on the rushes which had broken out on the Nelson South-Western district, I will further refer to the prosperity which had, in the early part of 1866, manifested itself in Westland. News of the most cheering nature was constantly coming to hand, telling nothing but a tale of uninterrupted prosperity, the discovery of new fields and the extension of old ones. From north to south the same cry was heard, and the most hopeful anticipations were indulged in. Beginning at a point 15 miles north of the Grey where several hundreds were located on the beach, and following the coast-line down, the same results were met with, wherever a community of miners were found,—results that will challenge competition with any other goldfield, since the early days of Victoria, so graphically depicted by Mr Bracken in his famous poem

"On Castlemaine, and Forest Creek, and Dear Old Bendigo."

Five miles north of the Grey, in shallow ground, near the beach, from 7 ozs. to 30 ozs. to the paddock was by no means uncommon, whilst at the Black Fellows rush, on the side of the range, at an elevation of 100 to 200 ft. above the sea-level, the gold was still better. Here a few of the claims were extraordinary rich, the wash-dirt turning out from 12 ozs. to 20 ozs. to the load. Thence to the Grey, scattered parties were working on the low terraces and beach, most of them obtaining very handsome returns. In the Arnold district one party of three miners got off the bottom of one paddock 80 ozs., and numbers were reported as earning £15 to £20 per week per man. The celebrated Three Mile rush south of the Grey was then supporting a large

population, and occasionally heavy parcels of gold were being sold from that locality. The original prospectors there were reported as having lodged 56 lbs. weight of the precious metal in the hands of Mr Proctor to be melted. But of all the rushes which took place that year, perhaps none deserves more honourable mention than the "Auckland" rush, which was essentially a beach working, the gold being found a little above high water. Prospects ranging from 1 dwt. to 7 ozs. to the dish have been washed here, and claims were opened which yielded £100 per week per man to the lucky holders. As a matter of course, there was some poor ground, but taken collectively, the claims on this lead stood unrivalled for the richness of the deposits contained in them, and the facility with which they were worked. This rush was distant about nine miles from Hokitika northwards along the sea shore. At this rush a "wages" claim usually bore the interpretation of £8 to £10 per man per week. From one of the rich claims as high as 64 ozs. was obtained in one day, and for several weeks Bill Hyde and his mates obtained 80 to 100 ozs. per week from their claim. The names of numbers of claimholders at the Kanieri, the Auckland rush, and at the Waimea, could be given, who cleared from £500 to £600 per man in a few weeks, and the final division, in one or two instances, after some six months' work, amounted to as much as £1500 per man. Probably some of my readers may set down many of these assertions as drawing on the imagination, but let me assure them that they are *bona fide* statements, of which convincing proof can be obtained by the incredulous at any moment.

Westport, Charleston, and Brighton were the next scenes of attraction. Miners flocked to each of these places towards the end of 1866 and beginning of 1867. This part of the coast was prospected by Reuben Waite and party, five or six years previous to the rush. Though diverging somewhat from the subject of this chapter, I cannot omit reference to this well-known pioneer, who may be said to be the discoverer of the Buller goldfield.

Reuben Waite was on the Collingwood goldfields about the month of May 1860, distance about 70 miles from Nelson, when a party of Maoris came overland from the Buller, travelling up by the sea coast. They had in their possession a considerable parcel of gold, which they said they had obtained from some ground 20 miles up the Buller River. Reuben at once determined to make for this new country, and he and a man named Rogers chartered the ketch "Jane" at Nelson, for the sum of £50. Reuben and his mate were laughed at by the slow-going Nelsonites of those days, and were described as madmen from Victoria. They got one adventurous soul on board at Nelson, and managed to add fourteen to the number when they called at Collingwood. They also took with them ten cats, a curious notion, but not to be wondered at by any one knowing Waite and his peculiarities. They arrived at the Buller in two days, crossing the bar in safety, and selling all their goods for gold to the Maoris. The Maoris subsequently named the river north of the Buller, the Orawaiti, meaning "Come on Waite." Very little prospecting was done by them on the occasion of this first expedition, and having sold their provisions to advantage, they returned to Nelson, after a rough trip of sixteen days,

leaving the rest of the party at the Buller. When Reuben returned to Nelson,—as he humorously puts it in a pamphlet published by him some years afterwards:—"Nothing was then said of the madman from Victoria; they were all very anxious to have some conversation with the madman, as they chose to call me. Many who were the first to stamp the expedition as a costly hair-brained enterprise, were now the first to ply their avocations, and hurry to the new-found *El Dorado*." The gold brought up by Waite was exhibited in a jeweller's window in Nelson, and this was the first mention of the Buller goldfields. Waite's subsequent history as a pioneer of the West Coast goldfields is worthy of a special chapter, and should limit permit, I will refer more fully to him at a later period. Of late years he has been residing at the junction of the Inangahua, where I last saw him about a year ago in excellent health and spirits. He was one of the first men I met at the Buller in 1866. He had then a run, which he obtained from the Nelson Provincial Government, of some 6000 acres, upon which the diggings known as Waite's Pakihis were discovered. All around was at that time becoming a flourishing goldfield. Mr Commissioner Kynnersley was the Government factotum, and had a *carte blanche* to lay off townships and make roads. He was a man of great enterprise and endurance; but the damp and discomforts of the coast in those days told on his constitution, and he died in Melbourne some years afterwards a martyr to consumption. Mr Kynnersley was succeeded by Dr Giles as Resident Magistrate and Warden, who had charge of the Nelson South West goldfields for many years, and who is now acting in the same capacities in Westland, and is Chief Commissioner of Lands at Hokitika. Westport was a stirring township at Christmas 1866, and the first newspaper, the *Westport Times*, was published on the 22d of December of that year. Three bank agencies were opened about that time, and miners were very prosperous on the terraces to the north of the town, some five or six miles distant, and on Addison's Flat, about the same distance to the south. Before the appointment of Dr Giles as Resident Magistrate, Mr Kynnersley had to attend to the duties of the whole district extending as far south as Cobden, where there were a number of civil, as well as Warden's cases to attend to. He was consequently absent from the northern parts, frequently for a fortnight at a time, and there being no gaols there established, the manner in which justice was meted out to those charged with drunkenness and more serious crimes was ludicrous in the extreme. One man was charged with stealing four shirts from a drapery establishment in Westport. He was given into custody, but no magistrate could be found, and the Sergeant of Police remanded the prisoner from time to time on his own account. After a second remand the prisoner was prompted to question the sergeant's authority, whereupon he was admitted to bail, again without authority, bail being fixed at £40. At last the prosecutor provided sureties! These were truly the primitive days of Westport. Court affairs were even carried with a higher hand at Brighton, for in the absence of the Magistrate, Mr James Payne, who was Clerk of the Court, passed sentences as the spirit moved him, never, however, inflicting lengthened punishment, as the prisoners were necessarily locked up in his own office and sleeping apartment. Mr

Payne's jurisdiction became a recognised institution by the peripatetic Court and by an easy-going public. Early in 1867, a substantial court-house, constables' quarters, and a gaol were erected in Westport, which was made headquarters for the Nelson goldfields. In October 1867, a rush took place to Mohikinui, north of the Buller, and for a month or two caused a considerable stir. The evening's attractions in Westport were the dancing casinos, three in number, all vying against one another in the strength of their musical bands, the number of ballet dancers, and the shortness of their skirts.

A few years later saw Gladstone Street—the main street in Westport—completely demolished by the action of the river and tide. Where the original town of Westport stood is now navigable by the ocean steamers. But a second town has sprung up a little farther inland, and Westport, as the emporium of large coalfields and extensive goldfields, is now a permanent capital of a thriving and important district.

THE MOHIKINUI, KARAMEA, AND NORTHWARD.

CHAPTER VII.

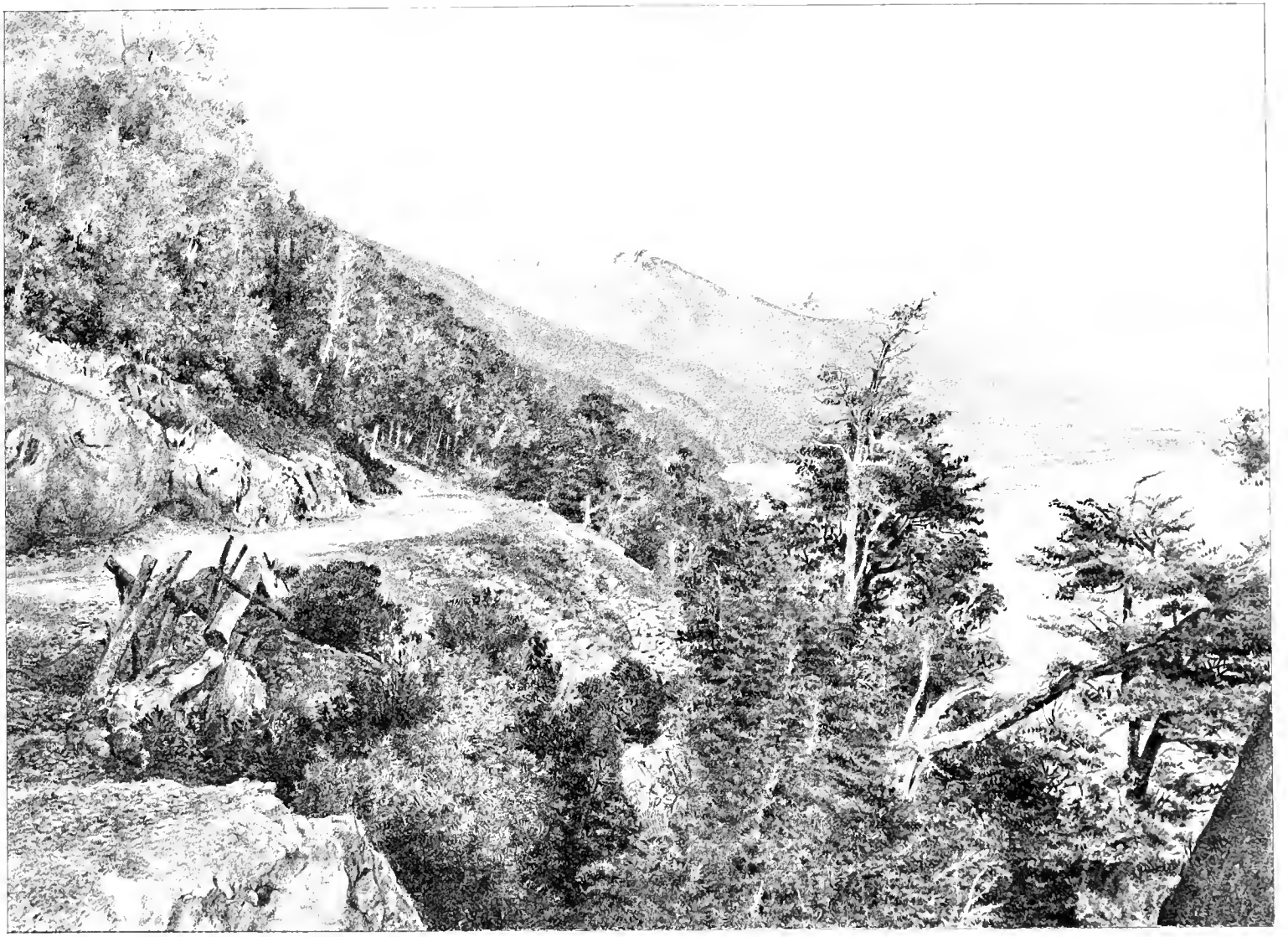
SOME years later than the periods referred to in the preceding chapter, my wandering inclinations led me to take a short outing northwards from the Buller. Scanning the coast-line in the direction of Rocky Point, the spectator, from the heights of Mount Rochfort, will observe a series of picturesque headlands projecting far into the sea, and between them deep indentations. These mark the courses of the Mohikinui, Wanganui, Karamea, Matiri, Wangapeka, Takaka, and Aorere streams, which traverse country scarcely yet open to civilisation, save on the banks of the first three named, and of which is now offered brief description, premising that the traveller in such direction goes there rather in search of practical knowledge of the country than in anticipation of a pleasurable excursion. In good sooth he will find the way rough and rugged, and his pedestrian powers and physical endurance well tested. Getting to the Ngakawau and fortifying for the journey before him at M'Nairn's snug hostelry, he will cross the stream, which at low water is barely knee deep, but at full tide will float a craft of 150 tons burthen, and, landing on the northern bank, will see, when the tide is out, a long stretch of smooth and firm sandy beach, along which locomotion on a fine day will be found most pleasant; especially if he travels at early morning, in the roseate glint of the newly wakened daylight, the fresh ocean breeze giving vigour to his stride, and bird life in the bush which skirts the shore stirring into harmony.

A seven mile walk will bring him to the banks of the Mohikinui, and amidst piles of driftwood, tons upon tons, in thousands, he will perceive traces of human habitation. Penetrating the circumvallation of ocean-tossed waifs and strays, borne by flood along the southern rivers, and thence by the ocean currents bearing northward, until left by the receding tides high and dry on land, an exhaustible supply of firewood, the traveller will suddenly find himself amid strange surroundings—the melancholy wreck of what was once a bustling little township. A half score or so of weather-worn wooden buildings, about as many adult inhabitants, some children, a few stray cows and horses, a multitude of geese, goats, and fowls, the people unkempt and patchy in attire, little recking how the world jogs, hugging to their breasts the despondency of their own disappointments. On the stranger they will gaze curiously, wondering what has brought him thither, but in rough and ready fashion they will make him welcome, and, if inclined to listen, they will not be slow to tell of past prosperity, of present unrequited hopes, and withal a sturdy reliance on future good luck. They will tell how, in the

mountains, of which glimpses may be seen up the wooded defile of the river, in places only accessible at peril of life and limb, quartz reefs abound, whence a few years ago fortunes were confidingly expected, but whereon, in such expectation, fortunes were spent unavailingly. They will tell with strong averment that payable quartz is there, but that difficult access bars all hope of profitable working; and they will tell also of creek workings, and haply show specimens of alluvial gold, heavy, water-worn flattened nuggets. "Mohikinui spuds" they fondly call them, which the miners dig out sometimes even with their sheath-knives from the rocky fissures and crevices, and from beneath the boulders of the mountain streams, Rough and Tumble Creek, and other far-off *locales* of similarly characteristic nomenclature. They will tell, too, many a sad story of loss of life by adventurous river men, who, voyaging up stream with supplies of food for their comrades, fossicking in the barren and rugged mountain solitudes, have been caught by sudden floods, their frail craft swamped, and they themselves lost in the swoop and swirl of the angry waters, wherein luckless mortal once engulfed is past all succour, and whence even the soddened and battered relics of mortality are rarely cast up again for "coroner's 'quest" or Christian burial. Turning to more cheery theme, they will point to the river running broad and straight and strong oceanward over a deep bar that never shifts, a channel that scarcely slackens even in the hot and droughty summer months, for then the snow melts on the mountain sides, and a thousand beaks and burns and brawling linns pour in their ice cold tributes. Up that river there is coal in abundance close to the banks; there is a wide stretch, too, of agricultural and pastoral land, and in the hills gold. It is the ever present story, the country only wants opening up, and in patient expectation the handful of dwellers at the Mohikinui wait and watch, like the sun worshippers of old, for the first gleam of returning prosperity. After brief rest the traveller must prepare for the onward journey—a forced march which will brook no delay, unless he is willing to spend a night of discomfort in the bush. He will have his choice of two difficult onward routes, and will find it advisable to discard every vestige of *impedimenta*. The inland track entails the fording of the stream about three miles from the mouth, at a wide and rocky ford, the current strong, and waist deep in places, the water icy cold. This uncomfortable preliminary got through, the commencement of a mountain track is discerned, narrow, steep, and overhung with dank vegetation, and knee deep in mud. Some seventeen miles or more of this has to be traversed, without respite or variety, except where the route crosses and re-crosses the Glass-eye stream, which it does so often that the way-worn and disgusted traveller will wonder by what perversion of human ingenuity such a route was ever chosen or track constructed. His astonishment will not be diminished when he learns how many thousands of pounds were spent thereon, and debited to the cost of the Karamea Special Settlement, one of the pet projects of the Vogelian epoch. However, if he is wise he will not venture on that route, of which indeed traces in many spots are now rapidly becoming obliterated by mountain slips and fast growing vegetation, but will, in preference, choose the beach route, which, though perilous and difficult, has at least the charm of variety. Crossing the river by ferry boat

a long stretch of beach is reached, but the firm white sand will be found to have given place to loose gravelly shingle, along which no great speed can be made by the pedestrian, and yet, as he will learn from the ferryman, it will be needful to put his best foot forward. If wise he will not travel this stage alone. Before him he will see, some few miles ahead, the rough contour of rocks stretching far out into the breakers, and round these as well as others which he will see further on, it will be needful to clamber while the tide is out, or if by chance tarrying too long by the way, the only alternative will be a compulsory halt perched on some rocky eminence or among the flax and bushes on a hill-side until the inflowing tide has ebbed again. It is a good eight or ten hours' journey for the average pedestrian from the Mohikinui to the Wanganui River, and the variations of the stage are these:—heavy walking on shingly beaches, clambering and jumping along masses of rocks and boulders, climbing steep cliffs, in one place only accomplished by aid of a pendant wire rope, many devious turnings through thick bush and fell, to make a way round the head of the many gullies which break the face of the hill, steep ascents and descents, trying to the mind and muscles; time only for briefest respite, for any symptom of prolonged halt will be greeted by admonition from the guide, "Push on, sir, push on, or you will be stuck up." Not by bushrangers, for in truth travellers along this route are few and far between, and carry nothing that would make good plunder, but by time and tide which wait for no man. When the last steep declivity is reached, and the traveller finds himself emerging from a track narrow and overgrown with ferns, flax, and leafy foliages, he will, on fording a narrow rivulet, see cause for expeditious movements. An immense heap of broken rocks forms one of the jaws, if the term may be used, of the mouth of the Wanganui River. When the tide is in, the breakers dash against these rocks even in calm weather with a force that sends the spray very many feet high, and any one then attempting to get round the point does so at the imminent peril of his life; the river also becomes swollen by the tidal inflow, and although a ferryman lives on the opposite bank, he wisely forbears from venturing to cross in his canoe until the tide has well run out again. The Otahu mountain, up whose almost vertical sides the traveller will have climbed in his journey from the Mohikinui to avoid the dangers of the rugged shore, shows a granite formation, alternating with limestone cliffs, some of which, known to navigators as the Otahu Bluffs, reach an altitude of 700 to 800 ft., of nearly perpendicular faces to the surf foaming at their base, and presenting most striking features on the coastal scenery when viewed from seaward. For the information of geologists the following extract is taken from Julius Haast's report of topographical and geological exploration, referring to the line of country just described:—"A mile north of the Ngakawau stream granite makes its appearance overlaid by tertiary deposits. It is here syenitic, and more towards the north trappean, changing in some places into felsite porphyry. In other places the mica is replaced by chlorite, and large veins of the same mineral are visible, intersecting the rock. We meet also with many porphyritic granites containing large orthoklas crystals, and with others containing albite in greater proportion. Some of the trappean

granites are full of rounded concretions of a blackish colour, and of a micaceous structure, exactly resembling the metamorphic schists which are observed near the hypogene rocks. These metamorphic rocks consist partly of micaceous schists and partly of granulites, and are intersected by occasional quartz veins. Their strike and dip are generally very irregular, their general strike is north and south, with a dip of sixty or eighty degrees towards the west. The cretaceous rocks which we meet with at the junction of the Inangahua and Buller extend to the coast, which they reach to the north of the Mohikinui stream. Here they consist of flaggy bluish and somewhat argillaceous limestone, intersected by large veins of calcspar, and in some places full of casts of fucoids. This rock extends, with only occasional intervals where granitoid rock crops out, to the mouth of the Wanganui, sometimes assuming the character of a chalk-marl, and sometimes that of a tabural whitish crystalline limestone, full of large oysters, pectens, terebratulas, and pieces of corals, in connection with the same fossils observed in the rocks between the Buller and Grey; but here also, as in the latter rocks, are no signs of belemnites or ammonites. The cretaceous cliffs at Otahu consist of bluish chalk marls from 8 to 12 ft. thick, of a white crystalline limestone, occasionally assuming a pale yellow colour, giving to the whole a ribbon-like appearance. In those sections where the limestone is found upon the granite we observe very interesting phenomena, indicating that during the deposition of the limestone great disturbances had taken place, either by earthquake or changes in the direction of great submarine currents. These sedimentary rocks frequently contain no fragments of hypogene rocks, and so continue for 20 or 30 ft., when they assume what at first blush would appear to be a granitoid appearance. In a calcareous base are disseminated quartz grains, crystals of feldspar, and scales of mica, in such abundance, that it is necessary to examine it closely in order to convince one's self of its mechanical origin. In other places the granite is overlaid by a breccia, consisting of large angular pieces of granite and mica schists, embedded in a base of green semi-crystalline limestone, which is besides full of quartz grains and mica. The greater the interval between the sedimentary deposits and the granite, the smaller are the angular pieces, the limestone itself becoming more whitish. At a distance of 30 or 40 ft. from the granite, the angular pieces altogether cease, and mica scales are only occasionally found. The limestone itself begins to assume an earthy texture, and 80 ft. from the granite changes into a chalk-marl. In other places, above 20 or 30 ft. of quietly deposited matter, fresh revolutions appear to have taken place, and large beds of breccia, similar to those before described, again make their appearance. The cretaceous formation leaves the coast at the mouth of the Wanganui, and strikes in a north-easterly direction towards the Tasman mountains, the detritus of which gneiss granite and metamorphic schists is again brought to the sea by the larger streams." As will be seen from this extract, to the geologist who has time at his disposal, and who makes preparations for a few days' camp life on the Otahu range, the coast-line between the Mohikinui and Wanganui streams offers a splendid scope for the collection of specimens. Gold prospectors have also found



COACH ROAD — NEAR WAIMAKARIRI

traces of gold in the Glass-eye and other small streams which here debouch on to the sands.

Crossing the Wanganui stream, the traveller instantly finds himself, as it were, in a new country, rocks and beetling crags and densely timbered acclivities have all disappeared, and he sees before him a long expanse of firm sandy beach, lapped by the sea waves on the left hand, and bounded on the right by a perpendicular bank of sand, topped by dense and apparently almost impenetrable scrub. Looking about for human habitation he will find no traces, but as he travels along the beach he will alight on one or more small parties of miners engaged in beach-combing, and by them directed will find that up this perpendicular wall here and there may be found faintly trodden paths, which, followed, lead into the scrub, and there, nestled in close shelter from the ocean gales, which at times rage with exceeding fury, will be found the snug little homesteads of some half dozen settlers and their families, who combine beach-combing with farming pursuits. The land hereabouts, after the bank is topped, extends back some two miles or so until it merges into swamp, and is on the whole of fair quality. With their yearly garden and field crops, a few score bushels of grain, their small flocks and herds, and an occasional washing up from the gold on the beach, the settlers hereabouts, though few in number, lead a quietly prosperous life, rarely seeing strangers, rarely leaving their homes, and in happy oblivion of much toil and turmoil which pervades the busier haunts of men. Their chief anxiety is centred on the beach, on the varying state of tide and currents, which either deposit new layers of black sand, or else for the time being swamp all traces. This auriferous black sand, which they literally comb up from the beach, and with primitive appliances extract the fine gold therefrom, is practically inexhaustible in supply, although it is only profitably worked at certain seasons. In appearance the gold they extract is more like the yellow pollen the bees collect from flowers than a metallic substance, and requires most careful manipulation before it passes into the hands of the gold-buyer.

Premising that the traveller has taken the precaution to ensure the company of a guide, he will have reached this point of his journey in safety and in broad daylight. To get there after nightfall would entail a bivouac on the sands, for the habitations hereabouts are so completely hidden that no wayfarer unacquainted with the *locale* can possibly hope to find them.

Having travelled comfortably along the fine sandy beach here described, the traveller reaches an undulating track of sandy ground, covered mainly with tea-tree scrub and flax, which encloses the tidal inlet of the Otumahana and Karamea Rivers, and, according to the state of the tide, he may either traverse the mud flats which stretch away to the banks of the Karamea River, or paddle down in a canoe. Getting near the mouth of the stream, he will be rewarded by the magnificent view of the mountain gorges through which the river and its tributaries flow, and the picturesque beauty of the foreground, wherein woodland and water effects blend in charming variety. It is in sooth a spot where the landscape painter would love to linger. A dreamy quiet rest on

the hills and valleys, the broad expanse of lagoon is margined not "by fruits of gold and whispering myrtles, glassing softest skies, clear and cloudless, save with rare and roseate shadows," but with the luxuriant New Zealand bush, which, in every season of the year, has a beauty all its own. The foliage, reflected like a beautiful mirage in the clear depths of the lagoon, or broken in kaleidoscopic fragments by the tiny wavelets and ripples of the river, clothes alike the uprising terrace and the low-lying alluvial flats; the sombre lines of the evergreen Fagus (black and white birch) being relieved by the bright bloom of the Loranthus (mistletoe), and the more vivid green of ferns in multiform variety, the graceful outline of the nikau palm, and here and there, in season, the brilliant red of the rata bloom, and the more subdued tints of the New Zealand fuschia. To the practical eye there will be an absence of marketable timber, but penetrating the bush, with its close interweavement of supplejack, there will be found many a giant of the forest to whom the poet's words will aptly apply—

"Majestic tree, whose wrinkled form hath stood
Age after age, the patriarch of the wood!
Thou who hast seen a thousand springs unfold
Their ravelled buds, and dip their flowers in gold,
Ten thousand times yon moon relight her horn,
And that bright star of even gild the morn."

Crossing the river, the traveller will reach what is termed the island, and will see a small jetty, an iron store, a stockyard, and one or more small buildings. Landing here and following a road a little way inland, he will come to the accommodation house kept by Host Simpson, and will here find good and comfortable lodgment and a genial welcome. Here is also the district schoolhouse and snug residence for the teacher. If anxious to know where the rest of the settlers live, a comprehensive sweep of the arm may indicate that some live "over there across the lagoon at the Black Swamp," some "up yonder," meaning a mile or two, or more, in the bush, and the rest at the "Promised Land." Half amused, half wondering query as to the origin or meaning of this latter designation may lead, if the traveller is inclined to listen, to a long tale of the history of the settlement, of the early struggles of the settlers, their disappointments, grievances, and hopes, as yet but half requited. Briefly put, the history of the settlement is this:—As far back as 1867 some of the early Nelson settlers, hearing that the land was good and the river afforded safe approach from seaward, made speculative purchase of sections in the Karamea district, getting the land at about ten shillings per acre, and looking upon their investments as something whereon by and by the "unearned increment" would total up to tangible profit without effort of their own. Years sped, and the profit on their investment seemed long in coming, in fact it is as yet in the dim uncertain distance. By and by our legislators, in their wisdom, bethought themselves of establishing special settlements, and the Karamea was selected as an eligible spot whereon to dump down—the phrase seems apt—a shipload of new chums. Whether the fact that their occupation of the country would add to the value of purchased lands

long lying idle had aught to do in the choice of the locality, is a moot point which need not now be debated. Certain it is that the very isolation of the spot marred at the outset the chances of the settlement proving a success, and there might have been found other and more eligible localities for settlement nearer Westport—at the Mohikinui, for instance, where good land, timber, coal, and gold are found, with a good river harbour, and also easy access by road and rail. In November 1874, a number of new arrivals (married men and families) from England, mostly from the southern and eastern counties, also a few Shetland fishermen, were transhipped from Nelson to the Karamea, with their little household belongings, a supply of stores, and the promise of periodical replenishment. These settlers were located on some high terrace land on the south side of the river, where 4000 acres had been set apart under "The Nelson Special Settlement Act, 1872," and here they built their huts, made clearings, and fenced their ground for cultivation. A road was made through this settlement, and also after a time the inland track from the Wanganui to the Mohikinui River. On this work the settlers were employed, and were paid good wages, the understanding being that working half time, the rest of their working days were to be spent on improving their small farm holdings. The idea was good, but the results were unsatisfactory. The inland road was badly laid off and badly constructed, and much money was wasted; the settlers found all their earnings absorbed in the cost of living; and worst of all, they found that the land they were trying to cultivate was absolutely worthless for growing either root or grain crops. Dissensions also arose between the settlers and those entrusted with the control of the settlement, and though official inquiries were held, and a mass of evidence gathered, the settlers to this day avow that the real cause of their grievances was never probed, and that the inquiry was but mere make-believe. This, however, was as nothing compared with the fact that they lost more than two years of their labour in attempting to bring into cultivation land well nigh worthless. In addition to these sections they had, however, been promised some other land on a heavily timbered flat close to the river, and some four miles up stream from the river mouth. To this "Promised Land," as they had learned to call it, all the families first located on the terrace ultimately flitted, and there, with renewed hopes and undaunted energy, commenced afresh the work of building up homes in the wilderness of scarce trodden bush land. Other families who had settled on the north side of the river, some at the swamp, and some in the bush, finding their land passably good, remained there, and have now snug and improving homesteads. The experiment at the "Promised Land" also proved successful, and at the present day it will be scarce possible to find in all New Zealand a more productive district. The ground, rich in all the elements which make culture a success, produces root and garden crops wherein prize vegetables are the rule and not the exception. Promoters of horticultural shows may here find a multitude of vegetarian trophies. Wheat, oats, barley, and maize, though grown, as yet, but in small quantities, yield plenteously. The bush affords succulent herbage, and fodder for live stock; and the settlers, though poor in world's goods, in money, and in house plenishings, have, in homely phrase, turned the corner of

their troubles, and have proved that special settlements, much as they have been decried by those who know naught about them, can be made a success, albeit the first experiments were costly, and, for a time, unsatisfactory. The Karamea settlers, like those at Jackson's Bay, have even now grievances which in justice and common humanity should not be ignored by those in authority. Isolated as these people are from all communication with the outer world, save the casual visit of a steamer, or by making a toilsome overland trip, dependent also on their own labour for the food they eat and the clothes they wear, they should not be forgotten in the annual vote of money by our Parliament. A few hundred pounds spent annually on road works, to open up back country and give facilities for gold prospecting, will be always money well spent, and will keep the Karameans in good heart.

Viewed from the road which runs along the river bank, this portion of the settlement presents a pretty picture. The clearings disclose the flat dotted with snug little cottages, each surrounded by its cultivated paddock and garden. Flowers, in their season, will be found in abundance, from choice specimens of roses or the gaudy dahlia, to the humble polyanthus and the daisy border. The hum of the busy bee falls soothingly on the ear, and the merry chirp of bird mingles with childhood's happy laughter, all telling of thrift and peace, and life's full vigour. Entering the settler's houses, the visitor will find hearty greeting, the best seat in the house at his disposal, the best fare in the cupboard spread for his refreshment. He will find amusement, interest, and food for quiet reflection in conversation with people, who, coming from their village homes in the quiet far-off English counties, have formed a compact community, still clinging to their old home associations, and knowing little of the colony they inhabit beyond the stray news now and again brought them.

Possibly having got so far on the northward, the tourist, hearing that beyond the Karamea there is little trace of human life or occupation, may bethink himself wise to retrace his steps and hie back once more to the Buller, and in such decision he will act discreetly, unless endowed with an ardent desire to penetrate scarce trodden solitudes. Three miles north of the Karamea is a pretty little stream called the Oparara, with a lagoon on the northern bank; and here one or two settlers, or rather cattle keepers, reside, whose herds roam in the bush and find good feed. A glance at a map of the coast will here best serve to indicate the line of country, of which now is submitted a cursory description. Three miles north of the Oparara the mountains again approach the coast, but a sandy beach continues as far as the Haihai River. At this river is found a steep bluff, which it is impossible to round at the base, and it becomes necessary to climb a hill some 700 ft. high, through dense vegetation, and thence descend again on the other side. After this is passed there comes another bit of sandy beach, and then a succession of giant boulders, until the Heaphy and Whakapoai River is reached. Here high limestone cliffs ascend abruptly from the northern bank of the stream, and some more stiff climbing is entailed amidst most wild surroundings. Following the coast-line, the route leading over a succession of rocks and small sandy beaches, the Taura-te-Weka

promontory is reached, a point beyond which few travellers have yet penetrated. For a description of the country past this point we are indebted again to Mr Von Haast's descriptive narrative, and which, though written twenty years ago, depicts difficulties of travel still existing. He says:—"Our route now continued over granite cliffs with almost vertical sides, the ledges of which were hardly wide enough for our footing. Over these we advanced slowly, and in some places we were compelled, by the steepness of the cliffs, to pass round them upon rocks lying in the surf, placed at unequal distance, and at unequal heights, to get over which we had to wait for a receding wave, and then jump as far as possible. During this process we were occasionally caught and wetted through, only saving ourselves by holding fast to the rocks while the water rushed to and fro, the effort requiring our entire strength. This part of the road from Taura-te-Weka to Kaurangi Point is called by the Maoris Taupiri-Kaka, and is much dreaded by them. . . . We resumed our journey the next morning, the nature of the coast being the same, but becoming wilder as we advanced. All along the edge of the sea stood rugged masses of rock, often formed into gigantic triumphal arches, as if nature had erected them to gratify its own power." Mr Thomas Brunner, the first intrepid explorer of this country, in his journal, describes this cliff in the following graphic manner:—"The Taupiri-Kaka is a steep cliff, against which the waves break on the perpendicular face of the rock, so as completely to prevent it being passed below, while inshore the mountain rises both steep and high, and presents also an impassable barrier. About 80 ft. above the sea, at a part where the point juts from the mountain, was a place which seemed as if it might afford a passage, and to this we climbed by a difficult rocky path through kenake bushes, and over and amongst large fragments of granite, but on the other side the descent seemed appalling, and we certainly, for a time, deemed it impracticable. At length, finding the remains of a rotten rope made by the Natives, we agreed that what had been done once could be done again, and upon looking down we at length perceived a ledge and some holes in the face of the rock, which might afford foothold. We, therefore, took courage and descended, but we found the descent most hazardous in passing round an overhanging rock, where it was necessary to lean backwards in order to get from one ledge to the other." Mr Brunner here confines the name Taupiri-Kaka to one rock, but the Natives apply it to the whole of the rugged and dreaded district between Taura-te-Weka and Kaurangi Point. Mr Von Haast continues—"In the afternoon we arrived at a small stream, which we ascended for half a mile, and then climbed the steep sides of the Kaurangi mountain, 1200 ft. high, on whose ridge we continued to travel a mile, when we again descended to the rocky beach. This, however, was the end of our hard walking. A quarter of a mile further brought us to a beautiful sandy beach, which we followed to Ihua Tueroa Point, consisting of cretaceous rocks, bearing a great resemblance to a ruined castle. From this point, looking towards the north, the coast is smooth, and we saw before us the heads of the West Wanganui Harbour, above which stood the rock points of Cape Farewell. Towards the east the low country was bounded by the Whakamarama range, which, with the

Hardinger Peak, was visible, whilst to the south lay the rocky road around and over which we had travelled for the last few days."

Between this point and the valley at the West Wanganui are the rivers Awaruatoa, Anaweka, Tuimahui-hui, Paturau, and Hapu, all fordable under ordinary circumstances. On the north bank of the latter river there is a limestone range some 1200 ft. high, densely clothed with forest, and which it is necessary to cross before reaching the picturesque West Wanganui Inlet. From thence comparatively easy travelling can be made to Collingwood, or if the traveller so desires, he may visit Cape Farewell and the Sandspit, conspicuous points in the coast scenery to travellers by steamer, either to or from Nelson.

WESTPORT, BULLER, AND MOUNT ROCHFORT.

CHAPTER VIII.

IN the early days of the West Coast, Westport was approachable only by sea. True, a number of diggers managed to make their way overland, mostly along the beach, from Greymouth, but the usual route was by steamer, either from north or south, to the Buller River. Nowadays, the traveller can reach Westport by mail coach from Nelson, as well as by similar means from the southern towns on the coast *viâ* Reefton. In this chapter I will ask my readers to accompany me on a trip by the old means of conveyance, by steamer, from Greymouth to Westport.

Sixty miles or thereabout of a journey north of the Grey, the voyager will reach the Buller River, Kawatiri in native nomenclature. He will notice, if the weather is clear, that past the Grey River the character of the country rapidly changes; the outline becomes more bold, and the Paparoha Mountains, running almost parallel with the coast-line, rise in rugged contour, showing high serrated peaks, with the rounded forms of granitic mountains in the foreground. As he coasts along, he may, by dint of good eyesight and clear binocular, catch sight of the little settlement of Brighton on the Fox River, and of Charleston Bay. As seen from the seaward, a patch of white dwellings on a clear upland terrace with forest-clad ranges in the rear and lofty snow-capped mountains in the distance. If perchance there is an old goldfield wayfarer aboard he may hear a yarn, oft told and losing nothing in variety by its repetition, how men in the early days of the coast, when the first tidings of gold at the Buller were rumoured, travelled overland from Canterbury to the Grey, in itself a perilous feat, and thence, nothing daunted, made their way along the coast, crossing the dread Razorback, forcing their path, by mountain, stream, and trackless forest, some dying by the way, others turning back appalled, all enduring privations which men, in these days of easy locomotion, little reck of, and he may listen to the tale with half wondering disbelief. It is true though that the West Coast exploration was fraught with much peril to life and limb, much long enduring privation and hardship.

Mr Reuben Waite, to whom I referred in a previous chapter as one of the pioneers of this district, thus relates an incident of the early difficulties to be contended with :— "On one trip, indeed, the 'Gipsy' was away thirteen weeks. We entered every harbour in Blind Bay, Port Hardy three times, and West Wanganui twice (driven by stress of weather). Off Rocky Point a sou'-wester met us, and nearing the Mohikinui we were becalmed two days. These were trying times, when the vessel, full of provisions, was in sight of two or three hundred diggers almost starving, and yet we could not reach them.

At length a light breeze brought us off the Buller, and we could plainly hear their shouts of 'Welcome,' and presently, with dingy and kedge, we worked her over the bar, amidst the clamour and cheers of the hungry diggers, who were watching us. While we were still in the roll of the seas, canoes came alongside, off went the hatches, and out went the flour and other provisions. When we got ashore we found the baker already making dampers in his oven, for when he saw the vessel close he lit his fire for baking. For a time there had been nothing but potatoes (eked out with eels, nikau, pipis, etc.). There was a lot of damaged flour, which had turned yellow and musty, and was intended for the pigs, but it all went for bread. Such was the state of affairs at the Buller in October and November 1862." The work of gold finding, as we have already noticed, went bravely on. In the rivers and ranges, north of the Buller and at the Pahikis southward, new ground was opened up; the then busy townships of Charleston, Brighton, and Addison's sprang into being; along the slopes of the Mount Rochfort ranges hardy miners clustered; and at the Mohikinui, thirty miles north, a bustling little township arose, and over as far north as the Wanganui, Ohimahana, and Karamea streams, the ubiquitous never-daunted digger found means of transporting his swag and tucker. Fortunes were made and spent, and the fame of the Buller goldfield spread afar. At the mouth of the Buller River a busy sea-port town arose, which has a history all its own, a tale of moving incidents and strange vicissitudes.

The voyager, after passing the Three Steeple Rocks and Cape Foulwind with its lighthouse perched on precipitous cliff, will find his craft steadily bearing towards the Buller. He will here scarcely fail, even if suffering the depressing influence of *mal de mer*, to notice the wide expanse of coastal scenery margining what is known as the Buller roadstead. The coast, which from the point of departure at the Grey trends to the northward for about fifty miles, then turns to the north-west for the next forty, until Rocky Point, the most westerly promontory of this part of the island, is reached. From the Buller mouth to this point is a continuous series of embayed beaches and picturesque headlands, the latter jutting out into the sea, backed up by high forest-covered hills, and behind these again, clad, for many months in the year, with dazzling snow, will be discerned the great mountain chain forming the backbone of the island, and whence the rivers of the West Coast take their rise. Crossing the Buller bar, the voyager will find not a narrow tortuous channel, but a wide and straight run in, up which vessels sail without danger, and where, already, a coal fleet comes and goes, carrying Mount Rochfort black diamonds to the markets of the world. Preparations have been made, a quarter of a million or more of pounds sterling spent in wharves, staiths, and railways, the coal is in the hills in millions of tons, the accumulation of ages, a store which a legion of cyclops could scarce diminish, and its production, as a marketable commodity, has now been fairly established. For this consummation dwellers on the banks of the Buller have long waited, and are, at last, realising their most sanguine expectations. It is, however, with past experiences rather than present expectations we are now dealing.

The steamer moored to the wharf, and our traveller ashore, he will, if curiosity inclines him, find no trouble in picking up a narrator of old times. He will hear, possibly with surprise, that the channel up which he has just sailed marks the site of early Westport; that where the broad yellow sands spread out at low tide, bush and scrub and verdant sward once grew, and cottages nestled in bright gardens; that there in consecrated ground the dead lay in peace, and lovers wandered 'mid leafy shadows. He will be shown where streets and wharfs once stood, and busy commerce had habitation, and will hear how, suddenly,

> "A wind woke from sleep
> And the waters began to heave and the weather to moan,
> And, or ever that evening ended, a great wave
> Like a wave that is born of an earthquake grew,
> And smote them."

And how, not only once but many times, the trouble came upon them, and they were sore beleaguered: the pitiless breakers in front of them, the flooded river sapping away its crumbling banks on one side, the marshy, uninhabitable, scarce explored bush on all others. He will hear of habitations being carried bodily out to sea, of whole streets demolished with the swoop of one turbulent tide, of a long continuing tussle with adverse elements, and will wonder if 'tis possible, under any circumstances, for a British born community to own itself beaten. Westport has at least survived its troubles, and many of the earliest residents, who endured all this toil and turmoil, still cling stedfastly to the spot where they so long wrestled with misfortune.

Running out from the upper portion of the town is the Westport and Ngakawau railway, constructed expressly to open up the coal traffic. This line traverses a country whence much wealth has been wrested. About midway on the line, the Westport Coal Company's mine, and others, have been successfully opened, from which large quantities of coal are now being shipped. Towering above all adjacent elevations stand the Mount Rochfort ranges, the most striking feature in the scenery of the district. The railway line traverses its base, and as the train rolls along the flat and somewhat swampy country in the direction of Waimangaroa, the traveller will mark that the lower slopes of the range are blurred and blotched with traces of digging work, and there will be pointed out to him, if curiously inclined, the sites of Caledonian, Giles, Rochfort, Deadman's, and other terraces, whereon, scarce twelve years ago, tunnelling and sluicing claims were in full swing, and in mining parlance good gold was getting. The Terrace men were for a time a power in themselves; strong in numbers, sturdy in union, they carried the sway in local politics. Many a tale could be told of candidates' adventures and misadventures among them. And so too in all other matters of local import, what they found to do they did with all their might. To-day the scene is changed: a few stray waifs cling to the old spot and fossick out a living, lured ever by the hope that some day a good lead will be again struck and bygone glories and attendant prosperity again revived, and the hope is not all visionary. Mining

experts assert that a good lead extends all along the West Coast from Collingwood to Jackson's Bay, and that it has been merely lost, not worked out, at Mount Rochfort. Speeding along, the train soon reaches Waimangaroa, a budding township of some promise. Here a line diverges to the coal workings, and here is centred a busy community. Again speeding on, the train, still skirting the foot of the ranges, and crossing swamp and stream, intersected country where the expenditure of many thousands was entailed before the permanent way for rails could be formed, the Ngakawau stream is reached. Here again the traveller will be told of coal seams discovered, of a company formed, of much ado being made to get a steamer in and out of the little inlet connecting with the sea, then a clamour for railway communication, and how, when the railway was made up to within a few chains of the coal pit, all works were stopped, a padlocked door prevented ingress or egress into the mine, and the rails have ever since lain rusting. But seeking less for facts unsatisfactory than striking scenery, the traveller will find ample charm in the views along the railway route. Huge mountains, bare heath, breezy upland, widespread plain, swamps suggestive of sport aquatic, ranges timber clad to the very summits, the exuberant foliage of New Zealand brake and fell, glimpses ever and anon of the bright blue sea, pleasant picture spots of cottage life and rural occupation, all combine in charming panorama, and the eye never wearies. And yet this will scarce suffice: his aspirations will soar yet higher, the views of the distant mountain tops will tempt him to scale heavenwards to see what comes within human ken and vision up there, where the huge masses of rock, torn and tossed and splintered in grotesque confusion, as if piled up by the fantastic caprice of genii, seem to mingle with the clouds. Some day when the coast, now almost untrodden ground to tourists, becomes better known, the assent of the Mount Rochfort ranges will form an incident in every traveller's programme. To-day the feat is rarely attempted save by occasional survey parties, and yet it is comparatively easy of accomplishment. Visitors inspecting the Westport and Koranui Company's coal inclines on the lower slopes of the Waimangaroa range, will now find the thriving township of Denniston. Before this township was formed, what was there to be seen is best described in the following extract from the narrative of exploration, published in 1861, by Dr Julius Haast, who had, in the previous year, been engaged in topographical and geological exploration of the Western District of Nelson Province, following after Messrs Rochfort and Mackay, who had previously penetrated, and in preliminary measure explored, the country. Copies of Dr Haast's pamphlet are now scarce, and hence extracts therefrom, in these present reminiscences, will prove of interest. After describing a first attempt to make the ascent, and his native guides becoming disheartened by the cold and snow, for the ascent was made in mid-winter, he says:—"On the 5th July I again ascended the mountain; there was not a cloud to be seen, and the whole country lay like a superb panorama before me. To the north appeared the Rocky Point of Taura-te-Weka, with other headlands, stretching into the sea. Above these rise a mass of mountains, amongst which towered the snow-clad giants of the central chain. Deep

valleys indicated the courses of the great rivers, amongst which the valley of the Karamea was most conspicuous. Towards the east lay the Lyell Mountains, with their bold unbroken outline, over which appeared the rugged peaks of Mount Owen, and of the mountains at the head of the eastern branch of the Matiri. Beyond the Lyell range, where it sloped towards the Buller, rose Mount Murchison, the three peaks of which, visible from Nelson, are well known. Following the line of the large opening between the Lyell and Brunner ranges, and the eastern mountain chain commencing above the Top-house and running to Mount Franklin, the highest point in the Spencer Mountains is observed, and a series of lower mountains forming regular cones, which plainly tell the history of this great fissure. The valley of the Tutaki, the Matakitaki, and the Maruia were also visible, and above the eastern chain, in the direction of the head of the Rotoroa lake, appeared Tapaianuku, the highest summit of the Kaikoras. Towards the south-east and south the rugged lines of the Brunner range were visible, broken through by the Awerau, the principal tributary of the Inangahua, over the broad valley of which the view reached to the Grey country and the Black Hill. This splendid panorama was further bounded by the Southern Alps, in front of which Kaimata lay conspicuous. More towards the south, across the Buller, I looked down into the valley of Ohika-iti and Ohika-nui, shut in at their heads by the rugged masses of the Paparoha chain, the whole presenting one of the finest and most magnificent views that it is possible to conceive. . . . The Papahaua chain consists of two ranges, one near the sea running north, the other, six miles to the east of it, at the Buller, running north-west, the two afterwards uniting in a common centre. I named the highest peak, upon which I had fixed my station, Mount Rochfort (3572 ft.), after the first European who had ascended it; the highest point in the eastern chain, Mount William (3611 ft.); and their common terminus on the north, Mount Frederick (3500 ft.). Between these two chains lies a platform, from 1300 to 1800 ft. high. The plateau is intersected by an incredible number of small streams, rivulets, and precipices, and is covered with manuka and sub-Alpine scrubs."

In making the descent, Dr Haast and his companion, Mr Burnett, made diligent search for coal, having previously found some small bits on the banks of a rivulet higher up the mountain, and he thus describes the discovery which led to subsequent exploration of the great Buller coal-field:—"At length my search was rewarded, for having passed up a little waterfall in a deep gully, I saw that the overhanging rocks were compact grits, and although my whole party had passed over the fall I at once returned, and having moved the moss which covered the stratum below these grits, I found to my great joy a large seam of good coal. Of course I stopped my party, who very soon returned to assist me in uncovering the seam, which, on removing the moss and ice that encumbered the fall, proved to be eight feet two inches of *pure coal*. A further examination of this valley, which I named Coalbrook Dale, proved that this seam was striking and dipping regularly."

Subsequent explorations of the Buller coal-field made by Mr Dobson and others have revealed seams 20 ft. thick, and the existence of wide spreading coal measures.

The aspiring tourist, reaching the summit of Mount Rochfort, a feat in mountain climbing which we may hope ere long to find, and often, among the records of the Alpine Club, where it will well compare, if not in difficulties of progress and perils by the way, with adventures among European crags and peaks, at least in story of wide expanse,

> 'Of antres vast and deserts idle,
> Rough quarries, rocks and hills, whose heads touch heaven,"

will gaze on the magnificent prospects attained, with mingled feelings of awe, reverence, and delight. In front of him the Pacific Ocean, a wide expanse of azure blue, its white downlike fringe of breakers lapping a hundred little bays and sandy stretches, looking in the distance like plains of deadened silver, environed landward with masses of sombre forestry, gradually uprising tier upon tier in wooded terrace and rugged acclivity until the bare mountain sides are reached. Northward he will see a series of bold headlands stretching far into the sea, intervallied by deep river courses, and backed up by snow-clad mountain giants. In nearer proximity in a southern direction, "still so near and yet so far," will be seen the Buller River, the township, and environs at its mouth dwarfed to a mere patch of pigmy dwellings and streaks of emerald verdure, ever in seeming peril of annihilation by the angry sea gods. The course of the river amid its mountain environments may be traced for miles. The immediate circumvallation of Mount Rochfort reveals a mass of broken granitic formation, deep ravines and precipices, mountain slips and wooded hills, extending from the timbered margined sea beach and swampy *pahikis* beyond, in broken confusion, until the snowy mountain tops are reached—Dame Nature's fortresses, wherein lie stores of mineral wealth, gold, and coal in abundance. It may interest the geologist if we here quote a portion of the report made by Julius Haast in 1861, who, at the request of the Nelson Provincial Government, made a topographical and geological exploration throughout what was then described as the Western Districts of the Nelson Province, at that time nearly a *terra incognita* save for the flying surveys made by Messrs Heaphy, Brunner, Rochfort, and Mackay, to whose labours in the cause of scientific research and exploration we have already referred. We may premise also our extract from Julius Haast's report by the statement that since 1861, a vast extent of coal seams has been traced and defined on the Mount Rochfort coal-fields, exceeding apparently all his expectations of probabilities or possibilities. Still the ever during hills are there, as they have been, and will be, from generation to generation, the same to-day as twenty years ago; and to the geologist who finds delight in scaling the rugged cliff, or burrowing in the bowels of the earth, hammer and satchel in hand, to gather chips whereon to build up new records of the world's history, the following extracts may prove interesting:—"Syenitic granite of an even structure, through which porphyritic granite protrudes in large veins, with occasional greenstone dikes, extends north of the Buller into the Papahaua range, forming hills of 500 to 1000 ft. high, and ceasing in the centre of the chain. On both its sides, uniting in the centre, lie the coal bearing strata, striking at Mount Rochfort, regularly east and west, with a dip of five degrees

DUSKY SOUND

From near the Copper Lode

towards the north. A very striking feature is, that these beds lie almost horizontally, forming near the sides of the granite wedge, vertical, and even in some places overhanging walls from 500 to 1500 ft. in height. These strata do not appear to have been upheaved by granite when in a soft state, but when this rock was in a solid condition, a proof of which we find near the sea, north of the Ngakawau stream. There large masses of porphyritic granite occur, resembling that which has protruded through the older syenitic granite. Near it we meet with a granitic breccia, consisting of large angular pieces of syenitic granite and micaceous rocks, embedded in a trappean granitic matrix, which could not have been formed by the rolling of the waves on the shore or by submarine currents, but only by friction, when the intruding masses upheaved the syenitic granite, and with it the coal bearing strata. In some other places, to the north of Mount Frederick, the porphyritic granite has itself intruded into the coal bearing strata, and many highly interesting rocks have been formed by alteration of the grits, coals, and shales. From the top of Mount Rochfort to the course of the Waimangaroa, which separates the last named mountain from Mount Frederick, the general strike of the carboniferous rocks, which attain here a thickness of 3500 ft., is from east to west, with a dip from 4 degrees to 7 degrees north, and the following is their succession in descending order, beginning at the top of Mount Rochfort :—

Coarse grits, with small beds of fine grained sandstones, ...	80	FT.
Conglomerate, in a matrix of white quartzose sand consisting of rounded pebbles of quartz and quartzite, ...	30	,,
Ferruginous sandstone (grindstone), ...	6	,,
Conglomerate, ...	40	,,
Sandstone, arenaceous, whitish green, ...	8	,,
Conglomerate, alternating with smaller beds of sandstone, ...	200	,,
Very micaceous grits, ...	120	,,
Shales, ...	15	,,

For the next 500 ft., the same attenuating succession of grits and shales continues, as observed in the gullies around Mount Rochfort, but without any apparent indications of coal. The shales, where not too micaceous, are replete with impressions of plants, all specifically the same as those in the Grey coal-fields, of which Voltzia is here the most conspicuous. Below them again for several hundred feet, slaty sandstones occur, succeeded by the grits and shales, amongst which I discovered a coal seam. In descending from Mount Rochfort, and crossing in an easterly direction the mountain plateau, intersected by innumerable streamlets, the rocky walls of which everywhere offer good sections, we again find ourselves, after having passed over all the strata before enumerated, amongst grits and shales. Having examined at least 80 ft. of these sandstones, the following strata, in descending order, are met with :—

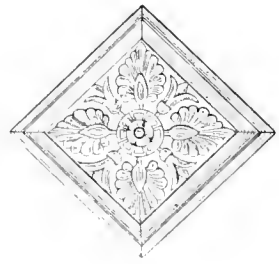
Tabular arenaceous sandstones, occasionally containing concretions of clay sandstone,	30	FT.
Coal seam, ...	8	,,
Shales, with small coal seams, ...	20	,,
Grits, sometimes very micaceous, sometimes coloured by carbon, ...	70	,,

The coal seam strikes regularly from north-north-east to south-south-west, with a dip of

6 degrees west-north-west. I traced it on both sides of the valley, and followed it also in other directions where transverse valleys have been cut through it. The following is an analysis:—

	Buller.	Sydney.
Carbon, ...	74·24	74·13
Hydrogen, Nitrogen, Oxygen, ...	25·76	25·87
	100·00	100·00

It may be as well here to add that the analysis of both coals was made upon surface specimens, which had been exposed for probably an indefinite period, both to the action of the atmosphere and to that of water, so that we may expect, on getting into the seam, that the amount of carbon will be found larger. The valley where this coal seam occurs lies 1914 ft. above the level of the sea." (We may add here that subsequent research has not only revealed other seams of coal besides this, the first discovered in the Buller district, but that experiment has corroborated Dr Haast's opinion that the coal possessed higher carbonic value. Readers are referred to the official records prepared by Dr Hector, the Government Geologist, Messrs Cox, Dobson, and others.)



THE HOKITIKA AND CHRISTCHURCH ROAD.

CHAPTER IX.

THIS volume will be found to contain seven lithographic views taken from different points on the interesting overland journey from Christchurch to Hokitika. They comprise the Otira Gorge, Bealey Gorge, Arthur's Pass, Lady Waterfall, Devil's Punchbowl, and two views of the Avenue on the western side of the ranges.

Tourists may first be informed of the cost of the journey from the Eastern capital overland to the West Coast. The information, as given in the "New Zealand Tourists' Vade Mecum," a small handbook to the services of the Union Steam Ship Company of New Zealand, which also contains a guide to the principal ports of the Colony visited by that Company's steamers, is as follows:—"Tourists who desire to visit the West Coast of the Middle Island would do well to travel overland from Christchurch, and thus secure the opportunity of driving through the magnificent scenery of the West Coast road, the passage of the Otira Gorge being inexpressibly grand and beautiful in the variety of its effects. Tourists taking this route travel by rail, 7.20 a.m., to Springfield (38 miles); fares—First Class, 5s. 8d.; second class, 3s. 9d.; return (Saturday), 7s. 6d. and 5s., whence on Tuesdays and Fridays coaches depart for Hokitika, Greymouth, Reefton, and Westport. Single fare, to Hokitika and Greymouth, £4, 10s.; return, available for one month, £7." To this we may add that coaches from the West Coast to Christchurch leave Hokitika every Tuesday and Friday at 5 a.m., taking on Greymouth and Kumara passengers at the latter place at 7 a.m., reaching Christchurch early the following evening, the fares being the same from either end.

The journey from the East to the West Coast of the South Island of New Zealand is, in truth, one of surpassing grandeur. It is universally admitted by the most experienced travellers that the road from Canterbury to Westland, presents the most picturesque, gorgeous, and romantic scenery of any part of the world. To quote the words of Mr Thomas Bracken, "Here we have a land, yet fresh from the hand of its Maker, formed in all the wild prodigality of natural beauty. A land of stupendous mountains, roaring cataracts, silvery cascades, fantastic volcanic formations, magnificent landscapes, noble forests, and picturesque lakes," meeting the tourist at every turn, in a thirty hours' journey. This West Coast road must be seen to be appreciated and enjoyed. The stupendous grandeur of the scenery in many places is beyond description, and is such as can only be realised by actual vision and experience. I have had the good and bad fortune to have travelled over this new "land of the mountain and the

flood" in all weathers and seasons. The sublime picture presented in the summer and autumn months when the rata is in full bloom, and the hills are crowned with luxuriant foliage, is not to be surpassed in variety and effect in any country under the sun. Likewise in mid-winter, when the Alpine ranges are clad in their snowy garments, and are "crowned with thousands of fantastic spires, turrets, and battlements towering above deep valleys filled with enormous glaciers," they carry, in their wild magnificence, a convincing proof of the omnipotence of the world's Great Architect.

There are two reports of journeys over this road, which have received publicity, and which struck me as furnishing most excellent descriptions of this grand tour and wonderful piece of country. The first is that which was written to a friend by the Rev. Charles Clarke, who made the overland journey to the West Coast in mid-summer of 1878, and the next is that of Mr Julian Thomas, well known to Australian and New Zealand readers as the "Vagabond," who visited the West Coast about mid-winter of 1883. Both accounts are well worthy of publication in this volume, as they will convey to the traveller the impression formed of the journey, by two able writers, at opposite seasons of the year. It may be explained that the driver of the coach in which the Rev. Mr Clarke travelled was Mr Thomas Power, an experienced whip, and a jovial fellow on the box. The severity of many winters among the ranges has of late told on his constitution, and though a young man, he is now a confirmed victim to rheumatism. "The Vagabond's" guide with the ribbons was Mr Arthur Davis, the present popular driver on the western side. Mr Cassidy, one of the proprietors of the line, has of late resumed personal charge on the eastern side, and to the credit of the management, it is no less pleasing than it is surprising to be said, that there has been no accident of a serious nature reported in connection with this line of coaches since it was first established.

The Rev. Charles Clarke, starting from Christchurch on a lovely summer morning, thus descants along the way:—"For a long distance there was nothing but a flat plain, more or less under cultivation, but not showing signs of extraordinary agricultural thrift and energy; it had a beauty of its own, for 'lowing herds wound slowly o'er the lea,' birds sprang from the dewy pastures, and soared aloft on twinkling wings. The air was fresh and bright, and in the blue the clouds were sailing like summer butterflies. The grass waved, the flowers nodded, the leaves danced, the young corn spread out its emerald spears to the sunshine. The very waters sparkled as if they felt a living joy. The little train jogged along contentedly through the level country, stopping here and there at stations like magnified packing cases, to take a leisurely little drink to slake the thirst of its parched little throat, and then toddled on again to where the ridge of snow-capped hills cut with sharp outline the clear morning sky." Reaching Porter's Pass, he proceeds to say:—"Steadily for an hour we climbed up the Pass, down which the coach bowls on its return journey in ten minutes, the road a mere shelf scooped out of the hillside, and zig-zagging on the brink of the precipice in a highly picturesque and nervous fashion.

The sunny afternoon was very peaceful. Nothing more startling than a cow-bell broke the silence ; an occasional change of horses was quite an exciting event, especially when the leaders refused to be 'hitched up,' and we began to think, as we nodded on the box, that, like the Vicar of Wakefield, we were living in a state of great comfort, and had neither revolutions to fear, nor fatigue to undergo.

"We were now fairly among the mountains, the road as it wound among the foot-hills seeming to be blocked up at every turn by the heights that appeared to crowd together for the purpose of gazing at us over one another's shoulders. Late in the afternoon we opened on a broad sunny valley, and saw on a distant hillside an assemblage of rocks, some grouped like the buildings of a Cyclopean city deserted by its founders, some standing alone, stern and grim like sentries petrified at their posts ; others again looking like the tombs of a colossal graveyard, or the circling seats of a vast amphitheatre ; and further still huge groups and solitary masses like the gigantic monoliths of Stonehenge. A wonderful spectacle, overspread as it was with mellow liquid lights, that flooded the hill-tops, lingered lovingly about the savage crags, and even trickled over into their sombre shadows.

"It has grown very cold, and the nipping eager air bites shrewdly.

> "'The stars are forth, the moon above the tops
> Of the snow-shining mountains.'"

At the time of Mr Clarke's visit, the Cass Hotel was the resting place for the night. Now the first day's journey ends at the Bealey, where there is a comfortable hotel, by the name of the "Glacier Hotel," kept by Mr James O'Malley. Proceeding from the Cass, Mr Clarke continues :—"After a hearty breakfast we were once again climbing hills, and bumping and crunching across river beds. We rejoiced in our special good fortune in respect of good weather; hundreds of prostrate trees and the scarred hillsides bear impress to the awful rage of the storms which sweep here all the winter long. The track is indicated sometimes by fallen trunks, and sometimes is half obliterated by the ravages of tempests. Now it winds through desolate marshes or wide belts of shingle, cleft here and there by rushing streams which, in wintry storms, or when the melting snow pours from the mountains, join in one mighty roaring torrent that overleaps its banks and sweeps rocks and trees in hideous confusion along its devastating course. After sundry ups and downs we entered the justly famous gorge of 'The Otira' (white waters). I cannot pretend to describe in detail this glorious region. It lives in my memory as a succession of forests, mountains, lakes, and waterfalls, as brilliant and fascinating as the most vivid fancy could depict, or the most exacting eye desire.

"There were bold hills covered with luxuriant foliage, the rich trees waving in the transparent air, backed by the white summits of still loftier ranges, upon whose surfaces, delicate and lovely, now monstrous or grotesque, the changeful light wrought itself in a magical variety of contrasted colours. Deep solitary ravines walled in by precipitous cliffs devoid of verdure, and overhanging the dark swift streams that swirl about their

bases, dismal to the eye and oppressive to the heart. Miles upon miles of road, smooth and well kept as the avenues of an English park, running through a dense undergrowth of stately fern trees and an endless variety of blooming creepers, that, intertwining each with other, formed an impenetrable jungle. The trunks and even the loftiest branches of the huge trees were coated with moss and hung with ferns, and looked like bearded druids, some clasped in the writhing coils of dark-stemmed rata vines, and yielding slowly to the insidious parasites which sap their vitals, while they make gay the surfaces of their life. There were hundreds of delicious chines, any one of which would make the fortune of its owner, could it be transferred to Devonshire or the Isle of Wight, nooks where the sunshine steals in and goes to sleep, and the winds breathe in soft whispers; festooned with trailing ferns and carpeted with fairy mosses, and overhung with dripping boughs that catch a brighter green from the translucent water that from a shelf of rock, 500 ft. above, comes leaping, sparkling, dancing, gurgling, dashing, and performing all the antics with which Southey credits the water that comes down the Lodore. This is the finest cascade in the gorge, and is supplied by an alpine lake lying 3000 ft. above the sea, and called the 'Devil's Punchbowl.'

"By-the-by, what a skilful engineer and what a thirsty soul that same Devil must be, or how is it that in so many different parts of the world he should have built so many bridges, dug his trident into so many chasms and passes, and scooped out so many dykes, basins, and punchbowls. If popular nomenclature goes for anything, it seems he has a hand in fashioning some of the boldest and grandest scenery on this planet.

"It is perfectly marvellous to note how Nature, with her two ministers of sun and water, repairs the ravages of the destroyer Man, and takes back her scarred and broken handiwork into her heart again. There was not a log by the wayside, or a cutting for the passage of the road, but every square foot of it was a microscopic study, embroidered with variegated mosses, and fringed with ferns of the rarest and most exquisite workmanship. The very stones were thickly coated with a minute lichen, bright scarlet of colour, and with an odour like violets. Everything bore witness to the ceaseless activity of Nature's deft and noiseless fingers.

"The scene changed perpetually, and weariness was charmed away as we rattled along the edge of precipices, where

> "'The tall pines dwindled down to shrubs
> In dizziness of distance.'

The road was full of sharp turns, round which the horses slipped in the most knowing fashion, the leaders making full tilt at the wall, and coming round with a swing, just as their noses scraped the rock.

"*Apropos* of horses, the driver assured us at one time that we were being drawn by a team of poets, Byron and Longfellow leading, with Milton and Moore as wheelers. He added that Shakespeare and Tennyson were the regular companions of Milton and

Byron, but unfortunately Shakespeare (save the mark) was lame, and the Laureate was at grass. Our next team, a fine lot of roans, bore very high-falutin titles—Julius Cæsar, Hannibal, Scipio, and Caius Gracchus. Inasmuch, however, as I heard the driver, in a moment of inadvertence, rebuke the Carthaginian general by the commonplace name of 'Fred,' I came to the conclusion that his nomenclature was a pleasant bit of bunkum manufactured for the occasion. More power to him! That coachman must have received a special unction from the father of all blarney, for he fibbed with a natural facility, and sweet imagination, grown quite uncommon in the terribly matter-of-fact days on which our lot is cast.

"Crossing the rivers is a process the reverse of re-assuring to nervous people, though there is really very little danger in ordinary weather, for the fords are carefully watched and sounded, the drivers particularly alert and skilful, and the horses patient, clever, and stanch. I cannot feel, however, that I would ever come to enjoy the sensation of the coach slipping bodily down steep banks, and bumping across wide beds of shingle, every stone of which seems to have a malignant faculty for jolting the vehicle in a contrary direction. Then comes a slow sliding plunge, and the straining horses are girth-deep, and the swirling waters, rushing against the wheels and under-carriage, makes one—in the language of the hymn—cast wistful eyes to the other side of Jordan, and wish to be at home. There is nothing sluggardly about these rivers, at all events, for they absolutely refuse to lie still in their beds, but rise up and shift their quarters upon the slightest provocation; and so far from studying the comfort and safety of the Queen's lieges, they seem to bubble and chuckle with malicious pleasure, if there appears to be a chance of swallowing up a coachful of unwary passengers. Perhaps it may be an excuse for their fractiousness to remember how often they are *crossed* by the travelling public. This afternoon we had a curious illustration of their treachery, and of the way in which, after many days, they disgorge their prey. Soon after crossing the Taipo (devil) river, a man on horseback hailed us, and holding up some tattered fragments of paper, said he had found the mail bags which had been swept away on 11th May 1876.

"Evening is drawing on apace, and our journey's end is near. There, full before us, is the sea. We catch the glitter of the crested surf, though its roar is inaudible at this distance. The sun is peering over the farthest verge of the level plain of waters, staining the deep with crimson, and lighting with a rosy glow the peaks of the enchanted region through which we have so lately passed. This soon fades, and as

> "'The Star of Evening
> Melts and trembles, though the purple
> Hangs suspended in the twilight,'

they stand out against the daffodil sky, glimmering with pale greenish hues; and as we rattle into the town, we can see them wrapped about their breasts with clinging mists, hooded with sombre clouds, silent, dark menacing—solemnity itself.

"I cannot express the enjoyment this trip has given me. It is a delightful compensa-

tion for my laborious life, that carries me through scenes whose beauty will dwell in my memory for ever."

Arriving in Westland, Mr Clarke concluded by saying, "The people are warm-hearted, free-handed, and intelligent, and have crowded to my lectures in an astonishing fashion. Everywhere I have had a cordial welcome, and substantial tokens of their appreciation."

"The Vagabond" visited the West Coast in the month of July 1883, as "special" for the *Australasian* newspaper. His communications appeared under the head of "Round About New Zealand." His start from Christchurch and his experiences to the summit of Porter's Pass are narrated as follows:—"My last day in Christchurch it blows great guns, and snow and hail and sleet complete my discomfort. Kind friends sympathise with me on the journey I am about to undertake, and urge me to tarry. Willingly I would do so. I long to see more of Christchurch and its people, but a warrior of the press must onward. This must not be my Capua; Rome on the West Coast awaits me; the passage of the Southern Alps and the Otira Gorge is before me. They pity me, these kind friends, and advise me to lay in a stock of blankets for the journey. I compromise by buying a woollen scarf of the most striking combination of hideous colours. But I confess I do not like it, as I sit up late in the comfortable smoking room listening to the howling of the wind. My only companion is the supremely ugly, and, therefore, of his kind, consummately beautiful, English bulldog Baby, who sits on another chair, and listens with the greatest attention to a case of international copyright which I read from the *Albany Law Journal*. Baby criticises this by licking his jaws and whining ferociously, as who would say, 'Let me at these publishers, and they shall feel my opinion.' I shall always remember Baby's sympathy with pleasure. It is a cold frosty morning when I leave the house of the genial Coker for an early start by the train at 8 a.m. In the cars one's idea is to coil up as warm as possible, and go to sleep. But 14 miles away on the south line one has to change at Rolleston Junction, and as I have no desire to be carried back to Dunedin, I must perforce keep awake. When I get into the local train, I find two other passengers. I eye them suspiciously, as they do me. Are they going overland, and will there be a contest for the box seat? We are going west now onward across the Canterbury plains to the Southern Alps, the snow on which lies low, showing the severity of the weather. Cultivated fields and English grass paddocks on each side. Smart settlements, with churches and schools. There is a junction to White Cliff, where there is coal. Next comes the township of Sheffield, rather a misnomer in an agricultural country. Then we arrive at Springfield, forty-three miles from Christchurch, and the terminus of the line. Here we have an early dinner at noon, before taking the five-horse coach over the first stage of the journey to the West Coast.

"The half hour that we wait Mr Cassidy utilises by showing me his horses and dogs. Both are warmly clothed. To see the greyhounds running about in thick coats is a sign I am in a country where there is a winter. The mayor and principal citizens interview

me and ask me to drink, to which, bearing in mind the journey I have before me, I assent. Besides, I remember what an unknown Western poet said :—

"'You see, it was the custom then
To shoot as quick as wink,
If any man should dare say "No!"
When axed to take a drink.

"'But folks out thar was posted up
In all them social laws;
And very few was ever shot
For that particular cause.'

I hope I shall never 'die in my boots' for refusing what down South we styled 'the courtesies customary amongst gentlemen.' I am on the road to the unknown (to me) West Coast. Wild and lawless in the old days by repute; a country of rough miners, quick, perchance, to take offence. I will give them no cause for such, but will obey their 'social laws,' and sacrifice my principles and my liver by imbibing their fusel when called upon! We start in triumph amidst the cheers of the whole population of Springfield. The departure and arrival of the bi-weekly coach is an event to them. We bowl along a good road, with a gradual ascent. All the way from Christchurch the rise has also been gradual, so the mountains do not look so high. The snow is lying about in patches. There is no bush, and the brown tussock grass has a dismal look, reminding me of the hills round the Clutha. A few miles out and we are at the bottom of a very steep incline, the road winding round the face of the mountain before us. Then the pleasant driver halts and seductively asks, 'Will any of you gentlemen like to walk up here?' I do not know why it is that I have not moral courage to refuse. I have paid £4, 10s., the fare from Springfield to Hokitika, and now I am asked to walk up the hardest pinch! However, as they all alight, I do likewise. 'I shall be at the top waiting for you,' says our Jehu, and he gallops his horses round the mountain, while we take the short cut by the old road through 'Porter's Pass,' the only practicable route discovered from the Canterbury Plains.

"A winding road through a narrow deep gorge. Nothing on the hillsides but snow patches and tussock. The mountain in many places casts a heavy shadow—the sun's rays do not reach us. The road is frost-bound. The streams which in summer would be babbling and breaking into a thousand ripples, are now sealed in the sleep of winter. Great icicles hang down from the banks. The path is covered with frozen snow and ice. The cold would be intense but that the hard exercise warms me. I am fain after a time to take off my thick coat and rest on a clump of hard grass. . . . It is a hard and stiff pull, indeed, of a mile and a-half, till we join the coach again, which has to go some twice the distance. We must have ascended 1500 ft. to 2000 ft. in a very short time, as we are now at the summit of Porter's Pass, 3400 ft. above the level of the sea. Close by is the highest telegraph pole in New Zealand. After this feat of walking over the pass I begin to think I shall yet be fit to ascend Mount Cook. The Excelsior spirit grows on one!

Still I am glad to mount the box-seat once more, and muffle myself up from the keen breeze which comes from the west.

"I think that this is a good case for a modern Mark Tapley, and I begin to wish that I had imitated Anthony Trollope, who never made this journey, but wrote his charming account from the descriptions given him by the warriors at Christchurch. Is it for this that I have come many miles to see the Otira Gorge? I doze, and fancy myself a glacier, and awake with my intellects frozen. The cold has increased, and there is six inches of snow on the ground. We are now at the top of the saddle of 'Arthur's Pass,' 3200 ft. high. Here is the division of the eastern and western watersheds, and of Canterbury and Westland. The sun rises. It is somewhere there behind the clouds. There is light, and the snow ceases a little. 'We go down 1500 ft. in a very short time,' says Davis. The brakes are hard down, and then full speed ahead. Below us is one great sea of fog and mist, into which we appear plunging. Down, and down at full gallop. We turn round sharp corners, which, with the certainty of what would happen if anything broke, makes the nervous shiver. There is a 'Devil's Elbow' in the beautiful drive over the hills from Adelaide. There are a dozen Devil's Elbows here. Down, and down. I have seen nothing like it but the Guyger Grade. All the while the cheery voice of Arthur Davis—gift of his Cambrian ancestors—rings out cheerily. It is contagious. I toss the stump of my cigar over the cliff—the bottom a thousand feet below. No matter *Judis les rois*, I burst out, when a great snowflake sweeps down my throat, and nearly chokes me. 'Hurrah! Come up, my beauties,' yells Davis, as he turns the coach round a corner which seems something like the apex of the *pon asinorum*. We are over the saddle of Arthur's Pass, and in the eastern end of the Otira Gorge."

Then the much-travelled "Vagabond" is fairly taken aback at the grandeur of the scenery at this particular point, and proceeds to give the following graphic description:—"Now the dawn breaks fully, and I am fully rewarded for all my trouble and the petty trials endured. Now I experience the culmination of all the beauties I have seen in New Zealand—of all the beauties I have seen under the Southern Cross. Never to be effaced from my memory a sight worth a journey over land and sea—worth a voyage from the old world—worth hardships and discomforts—worth a king's ransom—and yet which is within ten days of Melbourne or Sydney, and can be enjoyed for a trifling cost. New Zealand is a country of surprises in the beautiful; the southern and northern lake districts have each their admirers; but none can say they know this country thoroughly till they have been this drive to the West Coast. *Finis coronat opus.*

"This is the narrowest of passes; the Otira is a rapid stream, dashing over a rocky bed, whilst the mountains arise on each side thousands of feet above us, clothed everywhere with foliage which crowns the beauty of form and outline, giving light and colour to what otherwise would be like the Kawararu Gorge—grand but terrible. The character of the *flora* is changed, now that we are on the western slope; no longer the birch, with its sombre green, but red and white pines, giant fuschia trees, the *rata* and

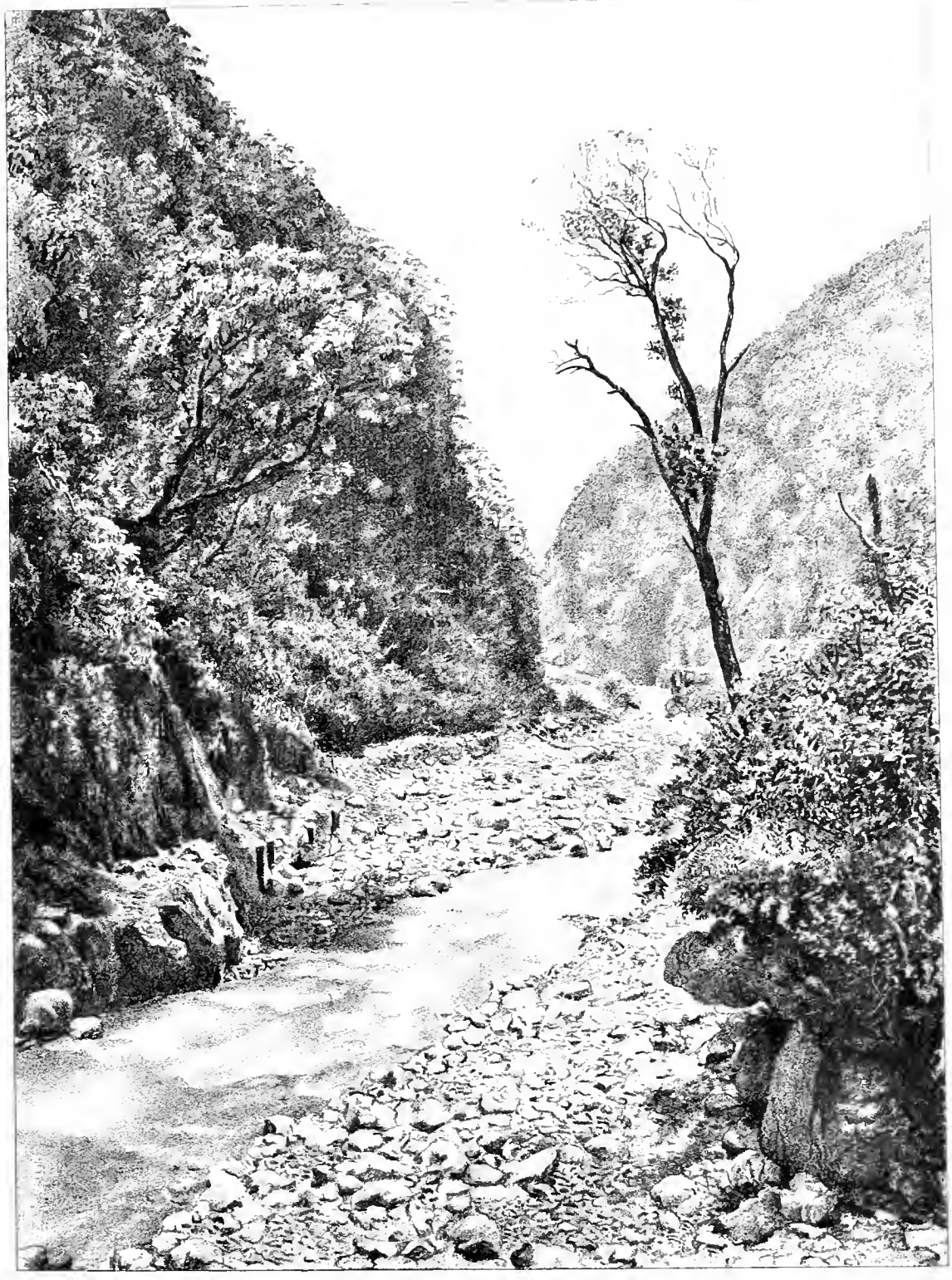
veronica. In summer time, tier upon tier of scarlet bands—a blaze of brilliant colour—relieved by a variety of shades of green from a thousand species of ferns and creepers. Nature has run riot here! The road is but a shelf along the ridge, mostly cut out of the solid rock which hangs overhead. In places it has to be built out, the timbers being bolted into the rocks. We overhang the torrent below whilst our three leaders turn the corners in front, chafling their harness against the boulders as they pass. In summer, how lovely! But now? Years ago, at some pantomime in London or Paris, I saw 'The Home of the Snow Queen'—a scene-painter's dream, an idyll of canvas, lime light, and mechanism, which from boyish days remained fixed on my memory. It is here reproduced in nature in the Otira Gorge. The driven snow has covered everything with virgin purity. Every bow of the pine, each leaf on the rata is traced in white. Every creeper trailing from the trees is a delicate festoon of snow. The great fronds of the giant ferns bend beneath the weight of the flakes which cover them; they are a thousand times more lovely than in their spring verdancy. It is a supremely beautiful sight, one which the driver says he has seldom seen. It is fairyland itself! Cascades tumble down the rocks into Otira, whose living crystals are only equalled by the great icicles which overhang the road; sheets of ice cover the hillsides. Every turn brings a different beauty of form as we gallop along for four miles. Everything is pure and chaste as the heaven from which we tell children the snow falls.

"A fearsome journey this. We are shown many places where teams have been over the side of the road. But no accident has ever happened to the coach. The horses are trained like those of a circus, and the driver is the perfection of human forethought. At half-past seven we arrive at the end of the Gorge, and halt at an accommodation house for breakfast. The first thing is to clean the coach from snow. I am in a regular bank, and have to be dug out. The driver's fur cap and beard are all frozen into one. He would serve as a good portrait of old Father Christmas. There are five bonnie young girls, rosy and healthy, at this place. The cold agrees with them. It has also given us a good appetite. On again, across the Otira, and over many mountain streams, which have suspension footbridges at the fords. In spring time, when the thaws take place, these torrents are often impassable for weeks. Through the fairy snow forest for miles until we strike the banks of the Teremakau, when suddenly the scene changes—everything is green instead of white. We are below the level of the snowfall, which is replaced by a soft rain. A long stretch of beautiful road called the Avenue is before us. There is a wonderful difference between the vegetation on the east and west coasts of New Zealand. It is the same as noticed on the west coast of North America, a luxuriance of Nature due to the heavy rainfall. Here there are great trees, giant ferns, which look like palms, lianas hanging from bough to bough, deep mossy carpets underneath, a thousand rills of water gurgling on each hand—it is tropical in the profusion of vegetable life. The forest meets overhead, and the road seems strangely familiar. It is the route from Fonwhari to La Foa. I wonder if Captain Rathonis, A.D.C., remembers the day when we rode thither, and our horses' hoofs rattled amongst the skulls of the dead convicts. The telegraph wire

completes the resemblance to New Caledonia; did not the rebel Canaques cut it down there, and use it in making the stockades, which Messrs E. and J. O'Donahue and myself discovered on our retreat from Oua Tom? Again, the road changes to a vista, which one may have often seen in the home woods of an English park, a drive for pheasants and foxes. I have Stoneleigh in my mind's eye when I see this. Anon, it is a scene in British Columbia. I pass through a dozen climates to-day, besides Fairyland in the Gorge. Everywhere it is beautiful, and if it is so in the winter, what is it in its summer glory? I repeat it is the culmination of all the beauties I have seen, and the traveller who fails to make the journey to the West Coast misses the grandest sight of its kind in the world.

"On we go by the side of the Teremakau, whose channel is broad and vague, but flood limits defined by high wooded banks. We pass a few scattered homesteads, a few patches of cultivation with fences of living fern tree; a few head of cattle are seen running in the bush; a saw-mill or two show we are approaching civilisation. We are nearing the mining districts of Westland, the province which separated itself from Canterbury in 1867, and whose history since the discovery of gold in 1864 has shown Homeric strivings with the forces of nature unsurpassed in the world. It must be remembered that a large portion of the Southern Alps is yet unexplored. 'It will never be known how many men have perished in these wild mountains and rivers, without a fellow-creature near, or any witness of their fate, but the lofty rocks and towering pine trees. Thousands came to this district year by year in pursuit of wealth, forsaking the comfort of their homes, to lead a life of wild excitement, ending in madness or death, or to perish alone in desolate places.' But the early gold seeker formed a province, in the second decade they married and settled, as witness the scores of children who run out and cheer us at Dillman's Town, the first mining settlement we pass through. Here I could imagine myself once more in parts of California or Nevada. Great flumes run across the road. Races, tail-races, sluice-boxes, sludge-channels—everything as one sees it on the Pacific coast. The hillsides have been washed away by water brought to bear through great hoses. The great heaps of stones are covered with a light red fungus, which gives forth a faint perfume. Everything is totally different to an Australian mining centre. Dillman's Town itself is not very extensive, and the architecture is of the primal digger order, every house having an iron chimney built outside. But the glimpses of reaches of the Teremakau River with its pine-clad banks are very beautiful, and the generally well-fed and well-clad air of the children shows that Dillman's is a prosperous community.

"On again to Kumara, where we leave a mail. This is quite an important place, full of banks and pubs.; and the Heathen Chinee flourishes in the land. It is very evident that the bottom has not dropped out of things on the West Coast, the same as it has in many places in Otago. Now for ten miles we pass through a mining district. Through Goldsborough (named after some Victorian admirer), through Stafford and Waimea. Water-races and flumes are on each hand. Pubs., banks, and stores in the township all



OTIRA GORGE

apparently doing a good trade. *Thalassa!* I behold the sea once more; it dashes moaning on the surf-beaten shores, which in the old days made the West Coast a name of terror to navigators. We cross the Arahura by a broad bridge. A small Maori settlement is here. The natives all live in wooden frame houses, and subsist on the rents of the reserved land set apart for them. They are the remains of the tribes which lived here, who put on considerable airs because the precious greenstone is found in their district. Pride had its fall, for the Maoris from the north came down and spoiled them of their treasure, and generally cleaned them out by killing and eating. Now there are only 50 natives in all Westland, and they are comparatively wealthy. The women wear blue dresses and smoke the strongest tobacco. A few more miles along a good road, and we bowl into Hokitika."

Speaking of Mr Arthur Davis, the driver of Cobb & Co.'s coach between the Bealey and Hokitika, "The Vagabond" says:—"Over the singles where there is no defined road, our driver takes us without the slighest hesitation. Night seems to him all the same as day. Suddenly the snow begins to fall, and it freezes as it falls. Such cold I have, perhaps, felt before, but it seems like a dream. Snow, snow, snow, it falls, all around us; it fills every corner in our rugs and clothing. We are snowed up behind and before. We can hardly see the leaders. The flakes come in heavy drifts striking in our faces, stinging and blinding. Up the hillsides, along the banks of the Bealey river by a perilous track, the danger of which we cannot see, high mountains above us, the gorge beneath us. For myself, I am one mass of icy snow, a frozen witness. Everything is white and chilly looking. Yet all the while Arthur Davis sings cheerily and encourages his horses; he seems perfectly happy and doesn't swear. A real 'gilt-edged driver' this. Of all the whips by whom I have sat in the colonies, he is the best. He 'takes the cake.' The other day Davis drove 150 miles in 23 hours without any rest, and then came in fresh and smiling. It is indeed true of him, 'a merry heart goes all the day; a sad heart dies in a mile.'"

Though somewhat apart from the subject of this chapter, we feel constrained to give "The Vagabond's" first impression of the West Coast, its climate, and its people. He proceeds:—"We are in another climate. The mildness of the air is charming after the cold of Otago and the ranges. A lovely place this Hokitika. The long stretch of surf-bound shore, crested billows everywhere save the entrance to the harbour in the Hokitika River, the town backed by the primeval forest, not like the Australian bush, but varying in colour and shade; far beyond is the range of the Alps towering to the skies, culminating in the monarch of New Zealand, Mount Cook. How lovely, how grand this looks in the clear atmosphere! And how surprising is this same clearness after the fogs and mist I have experienced around Wakitipu and Wanaka. I have an idea that, after all, this West Coast is the place to come for scenery. Mr Mueller, the chief surveyor, who is courtesy itself to me, points out on the map how Mount Cook can be reached in one day's journey from the sea, and he shows also the routes to the 'Franz Joseph' and other grand glaciers, which are miles in length, and which contain caverns

of beauty which the painter has never dreamed of, and in which adventurous travellers have encamped. What a fool I was to waste my time around the southern lakes! This evidently is the point of departure of the seeker of the sublime in nature. I am very much disappointed that I did not know of these things before. I am amongst a grand people now—open-hearted, hospitable, spontaneous."

Mr Falconer Larkworthy, Managing Director of the Bank of New Zealand in London, in a well-written pamphlet published in 1881, entitled "New Zealand Revisited," dwells at some length upon the beauties of the scenery of the West Coast. Writing of his trip from Christchurch to Hokitika, he says:—"The Alps in the Middle Island, 400 miles in length, resemble the Swiss Alps only in name, as their slopes are clothed with luxuriant vegetation, often to the snow level, and their shapes have a picturesqueness and individuality of their own, owing to their crystalline formation as against the great conglomerate beds of the Miocene formation of portions of the Swiss Alps.

"The Otira Gorge, through which the road passes from the East to the West Coast over this Alpine range, forms a tract of the most enchanting scenery in the Colony, not to be equalled by anything of a similar kind I have yet seen in any part of the world."

BRUCE BAY, PARINGA, ABBEY ROCKS, OKURA, WAITOTO, AND JACKSON'S BAY.

CHAPTER X.

THE southern journey can now be accomplished overland, from Hokitika to Jackson's Bay, on horseback. It is somewhat tedious, and difficult in places, and few travellers have undertaken the journey for pleasure. Deputy-Returning Officers, during an election, have ridden down and up in the course of twelve to fourteen days, and many others on special business missions have done the trip in even shorter time, though it is by no means an unusual occurrence for a traveller to be "stuck up" by floods for several weeks in journeying from either end. The overland trip is as yet attended with arduous labour and considerable risk. But, for any one who can readily spare the time and expense, this route presents many attractions in the way of lake, mountain, and glacier scenery. Having furnished my readers with a short sketch of the early days of Okarito, the Five-Mile Beach, Gillespie's, and Bruce Bay, the last named being the farthest limit I have reached overland, I will resume from that point a narrative of a trip southwards in 1876, with some further particulars to the latest date.

Scarcely had the handy little steamer "Waipara," which conveyed us from Hokitika, dropped anchor, and the whistle sounded, when, early as it was, lights were seen flickering along the shore, towards the south-east corner of Bruce Bay. The Maoris were at once astir, and with them their canine companions. There was as much clamour accompanying the landing of two boats containing a few bundles of hides and empty barrels, as might have attended Cæsar's first landing on the coast of Kent. It was still dark when the boats came alongside, and out of them came two small thatched houses, or objects which looked very like them. These were two elder members of the Maori community, carefully protected against the cold of the morning by being clad in flaxen cloaks, but barefoot and well wet by the landing of the boats. They were both weird, worn-looking men—one a chief, a gentleman of indefinite age, but a hardy sample of his race, capable of carrying weight for age with any one of his dusky brethren; the other with much more the expression of a Frenchman than a Maori, and with a nose and a cunning twinkle of the eye which fully justified his comparison to "Punch," by which name he had been generally known, though not so designated by his respected parents. They were accompanied by a fine strapping Maori of North Island birth, who is married to the chief's daughter, and who performed the duties of consignee, shipping agent, and interpreter, by receiving the goods intended for the Maoris, settling with the captain,

and reading to his unlettered brethren the advices from the Maori shippers at Hokitika. There were others, young and old, representing four generations in one direct line, the younger representatives being hearty English-speaking lads, some of whom had in past time been of service to some of our passengers by keeping a party of five supplied with fish and fowl—principally eels and wood-hens. It was evident, however, that the Maori denizens of the district were not now altogether reliant upon its natural resources, for here on deck we had bags of flour, of sugar, and of apples, with a camp oven, consigned to a gentleman of the name of Pipihini Hotomona, and others of that ilk. It was gratifying also to know that the natives were not more indifferent to spiritual food than they were to temporal, for we were told that by eighteen months' labour they had built a church, in size 20 ft. by 12 ft., for the preservation and decoration of which all that was necessary was a supply of white lead. Considering that it had been two years since a steamer had called at Bruce Bay, it was not surprising that ecclesiastical architecture had been of such slow development in these parts. An absence of nails, putty, and paint would have proved a serious circumstance even to Solomon, had such been necessary elements in the construction of the Temple.

Up to the present time the population is still very limited at Bruce Bay. One or two residents there, and at Hunt's Beach, a little to the northward, have found the advantage of combining cattle-rearing with occasional digging. Their supplies have been very irregular, as it is only when the sea is calm that goods can be landed in boats. But let us proceed on our journey.

Having seen the goods all safely landed; having seen Mount Cook emerge from darkness into brightest morning light, a glorious spectacle; having seen the sea-birds in flocks, fleeting on the wing, and looking for their breakfast; having heard the bell-birds sing their matin hymns, and the parson birds intone, as no priest could, their morning prayers; and having, in the midst of Nature's harmony, heard the steward's bell, the instincts of fallen man suggested mutton chops, coffee, and condensed milk. We followed the example of the sea-birds with much less of the poetry of motion, and they followed in the "Waipara's" wake as she steamed slowly round the bluff of Bruce Bay, Paringawards.

Before taking leave of Bruce Bay, let me say, that its name and history date no further back than the advent of the little steamer of that name, a pioneer of the West Coast steam fleets. The brightest pages of Bruce Bay history is to be found in Mr Frederick Greer's ledger, if that valuable and interesting volume is still extant, and the darkest in the memories of the men who were misled thither by their simple faith in Hunt's honesty and his supposed faculty of facile gold discovery. Once the scene of a heedless, headlong rush ending in dire disappointment, in uproar, and in threatened outrage, and once with only two of a population—one a madman, the other his keeper—its short history is well-nigh as picturesque as its surroundings. Though its population is now very small, still it is not Sodom beyond all salvation, and if there is anything in analogy, the back country bears such a strong resemblance to that surrounding the Buller,

MOUNT COOK. 13,200 FEET

FROM THE HOOKER GLACIER.

where ancient beaches have been worked, that fresh discoveries might yet be made, if it were but prospected.

We sail out of it southward, passing immediately on the other side of the bluff which forms its best protection, a crescent-shaped light sandy beach, behind which men searched for and never found either Hunt or his prospecting claim. The one, it is supposed, made his escape in "Black Sam's" sailing craft to Riverton from Paringa, the river which empties itself into another crescent-shaped bay immediately contiguous. The other is reasonably supposed to have been as mythical as the pretended prospector was mischievous.

As the outflow of the water of two great valleys, of a large lake, and an extensive snow-shed, the Paringa is often a river of considerable size, but as we passed it, it took its course quietly along the cliffs to the southward, with trees depending to the water's edge. Formerly it came out at or near the middle of the beach ; now—rude, amorous river—it "hugs the bluff." There was a particular beauty about the foliage of the latter as we passed it under the bright morning sunlight, variegated as it is by the mixture of bush, and this was but the beginning of one of the prettiest pieces of coast-sailing that is to be seen on west New Zealand. By "pretty" is meant the immediate coast-line—not the mountains, whose magnificence alone forbids the application of the adjective. Commencing with a detached rock set among bright yellow sands, there is a succession of beach and bluff, of capes and cavities, for a distance of several miles, the sandstone, which seems to be the prevalent formation, being riven and driven by ocean action into strange fantastic shapes. To the northward the top of Mount Cook seems to touch the arch of heaven ; southward the low line of cliff terminates in a long white beach, and beyond it chalky white cliffs stretched towards Arnott Point. The practical associations of the locality are that, towards Arnott Point in 1874, there was a small rush, and it was also reported that one or two nuggets, one weighing 7 ozs., had been picked up. The more picturesque portions of the shore-line provoked from passengers the remarks "What a splendid place for a sea-side picnic,"—"What an opportunity for the photographer," but our captain broke the spell by the simple suggestion "sand-flies," and by telling us a story of the experience of Mr Tait, photographer, in Hokitika, in the vain pursuit of the photographic art in the presence of these pests, which fed upon his face and hands, and followed him into his dark room, and damaged his plates and damned his enterprise. In their provoking presence, catching the shadow is too much associated with snatching the substance to make the study of photographic art a source of pleasure.

The Abbey Rocks, though not at once distinguishable as being situated at a distance from the shore, are a prominent landmark by the difference of their colour from that of the back-ground, which is of a subdued white, while they are dark and of eccentric form. The steamer swept around the rocks and entered a well-protected harbour, anchoring there, at no great distance from the shore, in seven fathoms of water.

At this time there was much talk of the layers of lithographic stone which had been

discovered by Messrs Arthur and Docherty, and upon the development of which a considerable sum was subsequently spent, but without returning any reward to the enterprising prospectors and shareholders. So sanguine were the shareholders of this enterprise, that they had several large pieces—tons I may say—cut, prepared, and polished, and taken to the London market by Messrs Arthur and Stenhouse. Their expectations being too great, they missed the opportunity of finding a good market. Subsequent tests of the stone threw some doubts upon the quality, and though, at one time, there was a good chance of an English firm embarking in the project, all negotiations at last fell through. During the year of the Melbourne Exhibition, I had an opportunity, with Mr Arthur, of bringing this stone under the notice of several German visitors who were interested in lithographic stone quarries on the Continent. We also enlisted the support of some prominent citizens in Melbourne in the publishing business, who were willing to make a trial shipment, but the tests made by Messrs Sands and M'Dougal at their Melbourne establishment were not so satisfactory as was expected. The samples forwarded were too small in size, and few were free from flaws of one kind or other. Possibly, however, when the large quarry is once opened out, this dormant enterprise may yet be found to be of value. But I am digressing.

We took from Abbey Rocks several pieces of this lithographic stone, and of so-called marble, as mementoes or exhibits when we returned to Hokitika. We brought with us also, inadvertently, and quite involuntarily, a following of sand-flies, which were not appreciated as an accession to the company in the steamer's cabin, and seriously subdued the *West Coast Times* correspondent in a moment of poetic inspiration. He saw in the rocks the ruined abbey which the early surveyors were sentimental enough to suppose they resembled; he marked a miniature waterfall, the curling smoke from the fern cottage, the bright pebbles of the beach, the bush beyond, and the feathered songsters sitting on the boughs; he listened to the music of the waves and of those warblers; he was all but saying something about Paradise, when he suddenly slapped his ear—and missed—and swore.

Arnott Point, the next and last prominent headland in the passage to Jackson's Bay, is distinguished by the number of detached rocks by which it is sentinelled. Beyond, the cliffs slope down till they disappear, and are succeeded by an almost dead flat at the sea front—the longest stretch of low country to be seen on the coast. Immediately before reaching the flat frontage to the mountain range, through which flow the Haast, Okura, Waitoto, and Arawata, we see Ship Creek, where was found the remnant of wreck, which has been the subject of so much speculation and some scientific deduction. We suppose that since Captain Turnbull suggested it, and Messrs Hall & Co., of Aberdeen, confirm it, we must conclude that the wreck in question was portions of the stranded vessel "Schomberg," carried thither by the influence of ocean currents; but with all respect to the scientific, it seems a pity we could not longer have enjoyed this maritime relic as a source of mystery and romance. It was so interesting to suppose that this wreck, with trees now growing among its timbers, was stranded here in years long past,

and to speculate on the fate of the crew in this strange country, where people are few and far between, or not at all, and better not at all than few, since, meeting with a stranger, they took him in—their mouths—and, without reading or learning, marked and inwardly digested him. These ship captains are now-a-days so given to accurate investigations, that there is no chance for a second Sinbad or romantic Robinson Crusoe.

Mount Mosquito marks the vicinity of the Haast, and in the vicinity of the Haast there still is, and has been for many years, another Marks, a pioneer storekeeper in the southern district. The beach between the Haast and Okura was once a busy scene of diggers, of which mention has already been made in this volume.

The next river to be entered is the Okura. Like the Haast, it is not always accessible. Here the traveller is almost sure to meet, as we did, a man happy in his solitude, hearty in his hospitality, and as picturesque in character and costume as his strangely chosen, but beautiful situation—that man being none other than Joe Collyer, a name well known in these parts, and a "jolly good fellow." Collyer officiates, at all times, as harbour-master, signalman, boatman, wharfinger, guide, philosopher, and friend to all who visit the Okura. Some excellent land is to be found about the several branches of this river, and where it is swamp, the swamp is not of that description known as the "pakihi," but a soil of good deep loam, capable by drainage, for which there are facilities, of being fitted for cultivation. The timber also hereabout is the best on the West Coast.

The Waitoto is the next river that is passed, six miles from Arawata, which is again three miles from Jackson's Bay, towards which we are steaming, as the sun is setting. Our first view of the Arawata township was obtained as the sun was setting behind the peninsula, some of its last rays lingering in the little valley in which the town is situated. Generally, in regard to its surroundings, and particularly in regard to its water frontage, Port Arawata bears a close resemblance to the situation of Port Chalmers. It differs from Port Chalmers inasmuch as it is not situated within the shelter of magnificent headlands, nor do the hills surrounding it occupy the same position, according to the compass; but otherwise the contour of the country is strikingly similar.

Special correspondents have, in past years, written so much of Jackson's Bay, and its prospects as a place of settlement, and so few of their hopeful prognostications have been realised, that we think it best to draw the veil, rather than enlarge, in these pages, upon its unsuccessful history as a special settlement.

Geographically, the cliffs around Jackson's Bay are interesting by the variety of the formations—as a large area of the country around may be said to be. There are slate, sandstone, limestone, and some strange conglomerates. Between the two first bluffs we pass, there is a slate face in which there are numerous quartz-leaders, and at its foot there have been found, in crevices, several specimens of shotty gold. In fact, all the gold that has been got about Jackson's Bay and headland—and there have been some pockets of peculiar richness—indicates by its character that it has not been carried any great distance, or subjected to the pulverising process of beach or river wash or wear. In one instance, 600 ozs. are said to have been got in a sort of natural ripple-box

among the rocks south of Jackson's, and 60 or 80 ozs. in another corner, where a miner was wont to wash out a few pennyweights daily. Even in front of Arawata township the beach was once worked. Small seams of coal have been found in various directions, but not in sufficient quantity to warrant the hope that this is the situation of a substantial seam. Whether it will yet be discovered in payable quantity or not, there is no doubt that the geological formation favours the assumption that coal, which was found by Mr Docherty in the country behind Abbey Rocks, extends also thus far south. The sandstone is precisely similar to that with which the Brunner coal is allied, and the formation is found to be more extensive than was supposed by Dr Haast, who assumed that some of the surrounding hills, now known to be sandstone, were of granite. Still further along the road, there is a face of fine limestone—superior to the kinds commonly found on the coast. Its appearance asserts it to be so; but practical test by fire and water has also proved it to be exceptionally excellent. Boulders of conglomerate—mammoth plum-puddings—are occasional objects along the beach, and for ornamental flooring or such purposes nothing could be more suitable; but, like the coal, galena, lithographic stone, and marble, and many admirable things along this line of coast which might be converted into domestic luxuries, they must remain unutilised, until available means are forthcoming for their development.

One noticeable feature in connection with portions of this southern district is the existence of the merry bell-bird. The same writer to whom we have referred in our introductory chapter, when on a literary mission to Jackson's Bay, thus speaks of the sweet chimes of those pleasing melodists:—"How these little bell-birds improve the shining hours as the morning sun sends forth a flood of light over the snow-white mountain tops, across the bright blue waters of the bay, and athwart the wooded hill-sides where they are hidden, and yet so loudly heard. Each morning comes upon them like a new creation, and they hail it joyfully—ringing out sweet sounds which, with the modulating echoes, fill the whole air with melody. Sun-worshippers they must be, they are so sensitive to his approach, and so ceaselessly and universally eager to accord him praise. Everywhere—and as if it would be for ever—bells, bells, bells! And chiming so together, and with the notes of other warblers, that all would seem to be set in concert. The tui, too, sounds some smaller bell notes, and fails to comprehend the solemnity of the situation when he whistles and chuckles, in his own queer way, in expression of his own enjoyment. One morning's experience of such music—to drop from the sublime—is an excellent antidote for the bane of boarding and lodging in even the best hotels on this West Coast. Give us—oh, give us—the bell-bird before the Brahmapootra and the Guinea-fowl, the duck and the goose, and all other living instruments of torture to be found in hotel back-yards—found in the early morning, full of crow, quack, and gabble, when they are least wanted. The comparison is odious. Yes; let us listen to the bell-bird, and listen respectfully, for though he abounds in Jackson's Bay, and in several similar situations, he has, since New Zealand first saw civilisation, strangely disappeared from many parts, and may do so, in a few years, from many more." A hundred years ago,

Captain Cook, in a situation now frequented, but then somewhat like ours on board the "Waipara," wrote this of the bell-bird:—"The ship lay at the distance of somewhat less than a quarter of a mile from the shore, and in the morning we were awakened by the singing of the birds. The number was incredible, and they seemed to strain their throats in emulation of each other. The wild melody was infinitely superior to anything of the same kind that we had ever heard. It seemed to be like small bells most exquisitely tuned, and perhaps the distance and the water between might be no small advantage to the sound." Other observers, such as Dr Buller, in his "Book of Birds," has written—"Its ordinary song is not unlike that of the tui, or parson-bird; but it is more melifluous. Its notes, though simple, are various and sweetly chimed. And, as the bird is of social habits, the morning anthem in which these sylvan choristers perform together is a concert of eccentric parts, producing a wild but pleasing melody." And then we are told by the same authority that "this bird, formerly very plentiful in every part of the country, appears to be rapidly dying out; in some districts, where it was a few years ago the commonest bird, it has now entirely vanished."

As the foregoing portion of this chapter deals principally with travels, circumstances, and events of by-gone years, I will conclude this portion of my publication with some account of what is being done in these southern parts, at the present time—the end of 1884. And as the present County Chairman, Mr Peter Dungan, has recently furnished the County Council with a report of an official visit made by him in September last, I will give, in a condensed form, hereunder, such particulars, gathered therefrom, as may be of interest to my readers. Payable gold is being got at the lower part of the County, some miners being at present working in the neighbourhood of Big Bay. There is also a good opinion held of the Gorge River in the same district, nice samples of gold having been obtained there. The Stafford Valley run, of 10,000 acres, is held by Mr C. Robinson; and the Cascade district, of 25,000 acres, by Mr W. Bruce. The population of Jackson's Bay district numbers about 200 souls. The settlers are chiefly engaged in raising cattle and dairy produce, and there is some mining going on along the beaches. There are 14 settlers, holding in occupation 500 acres of freehold land. Messrs Callery, Jackson, and Collins are lessees of the Arawata run, comprising 30,000 acres. There are about 180 acres of freehold land in occupation, and a run of 16,000 acres in the Waitoto, held by Nisson and Casey, two of its settlers. There are two settlements at the Okura and Turnbull Rivers, close to each other, and embrace a nice block of country. There are nine settlers, holding in the aggregate 900 acres of freehold land. The Turnbull and Okura Valley runs, comprising 30,000 acres, are held by W. Cuttance. There are some miners working on the beaches between the Okura and the Haast Rivers, and a few parties also on what is called the Black Lead. At the Haast there are 300 acres of freehold land in occupation; Messrs Marks and Stewart holding the Haast Valley run of 30,000 acres. From the Haast to Paringa is a distance of forty miles. This is a portion of the main south road. There are about twenty-five miles made over a rough and mountainous country which intersects the Blue River and Maori River Valleys, and at one point having

an elevation of over 2000 ft. above the sea-level, snow being frequently met with on the journey. There were some trees down with a number of slips, but none of a bad or dangerous nature. With the exception of these small and temporary obstacles, the chief parts of the road are in fine order. There are two government huts in good repair in the ranges, but are not observable from the road by passers-by. A couple of finger-posts have recently been placed alongside the road, as a guide to where they are to be found. In times of bad weather such shelter would be appreciated as against the chances of being benighted on this wild and lonely portion of the road. The distance from the Paringa to Blue River is ten miles; a wire bridge of 170 ft. span has been placed over this dangerous river. Two miles of the Paringa side of the river, on the main road, a surveyed line of eight miles has also been laid off by the chief Surveyor, and terminating on the beach line between the Abbey Rocks and the Blue River. This track when made is to open up land for sale, and will be a great boon to the district in the way of travelling and prospecting. Good samples of gold have been got in the district at Bullock Creek and Little River. The country is rough and difficult of access. There are over 2300 acres of freehold land held among the settlers on the Paringa. The Maori River run, of 15,000 acres, is held by W. Duncan. A run of 1000 acres is held by R. Dee; the Blue River Valley run, of 10,000 acres, by E. Ryan. The Paringa Lake and Abbey Rocks run, of 20,000 acres, is leased by W. Stephenson; and the Paringa and Blackwater Valley runs, of 15,000 acres, are held by Power Brothers. There are a few settlers up the Mahitahi River, holding over 200 acres of freehold land. The Valley run, of 20,000 acres, is held by J. Condon. Several parties of miners are working on Bruce Bay beach. Mulvaney, Olsen, and party, after 15 months' hard labour in bringing in a head-race a considerable distance, have got an unfailing supply of water, and a good mining property in their possession. Small parties of miners are also to be met with at Hunt's and intervening beaches, to Gillespie's. The Jacob's River run, of 15,000 acres, is held by H. Borneman; Hunt's River run, of 10,000 acres, is held by Ritchie; Karangarua River run, of 20,000 acres, is held by D. Macdonald; and Cook's River run, of 20,000 acres, is held by E. Ryan and Little. There is here a homestead block of 5000 acres, on which are living three settlers, holding 180 acres. There are some miners working up the Cook's River, and some good patches of gold are got now and again. There is a track for packing running up the side of Cook's River for three or four miles. From Gillespie's to Okarito, a few parties are working along the beaches. The Valley run is held by N. Gibbs, a miner and settler in the place. The Omeomaa Valley run, of 10,000 acres, is held by J. Gault. Waiho and Totara runs, 13,000 acres, are held by M'Fetrich & Co. A few scattered parties are working about the Okarito Forks. The bulk of the miners about this place and at Mapourika are engaged in terrace working. There are 14 settlers in the Waitangi or Wateroa settlement, occupying between 800 and 900 acres of freehold land. The Wateroa run, of 20,000 acres, is held by Burroghs, Butler, & Co. There is another run in the district, held by W. Smith, of 10,000 acres. There is a tract of country of 25,000 acres in this locality, a large portion being good agricultural land, and a similar block of

12,000 acres of clear flat land, the finest of its kind to be seen on the West Coast, lying between the Wanganui River; the main road through this place is fifteen miles from the beach line. The Little Wanganui Valley run, of 6000 acres, is held by Ferguson and Stege. The Big Wanganui run, of 20,000 acres, is held by H. Deidrich. There are nine settlers holding about 500 acres of freehold land. The Big Waitahi Valley run, of 10,000 acres, is held by Evans, Allen, & Co. The Happy Valley run, of 5000 acres, is held by Ferguson. The Mikonui run, of 13,000 acres, is held by Ferguson Brothers. There are 600 acres of freehold land held in the neighbourhood of the Mikonui. Some parties of miners are working on the beach line between the Wateroa and the Mikonui. Generally speaking, the roads down south are in good order. The main south road when completed will be a great benefit to Westland. It is at present finished to the Waikupakup River south of the Waiho—a distance of over a hundred miles from Ross. To the Paringa, a distance of over forty miles from the Waikupakup, the road is not yet made. From Paringa to the Haast, thirty out of forty miles of the road have been constructed, five miles of track deviation being made to the beach, and five miles along the coast-line to the Haast. From the Haast to the Arawata (over thirty miles) the road is not made, but seven miles of the Arawata road lead to Jackson's Bay, and the additional nine miles being made to the Stafford River will be continued to the end of the county, the whole distance from Ross to that point being two hundred and fifty miles.

The County Chairman, having visited these southern localities for the first time, while furnishing many practical suggestions to the Council, could not avoid concluding his report with remarking on the magnificent scenery presented at every turn. On reaching the Waiho, he makes note:—"The Waiho Glacier—commonly called the Francis Joseph Glacier—in the immediate vicinity, is a rare sight, indeed one of the world's wonders to behold. The hot springs in the same locality are another wonder to witness. Their curative powers have been tested by many in the district, and found of great benefit, and may become famous some day. In fact, there is not a spot within the sea-girt isles of New Zealand that has so many rare and beautiful scenes as can be witnessed in the southern parts of Westland. Many parts of this unknown country, from its wild and rugged character, might truly be termed the land of mountain and flood. Its snow-capped mountains, lovely lakes, waterfalls, ravines, wondrous glaciers, hot springs, and sulphur springs, are worth to the tourist and admirer of picturesque and matchless scenery, a long journey to witness. But beyond all, and more marvellous to behold and to admire, is Mount Cook, of world-wide fame. Its snow-capped peaks, glittering in the morning sun, form a scene of surpassing loveliness; its majestic grandeur making it the monarch of the southern world."

MOUNT RANGITOTO.—A SEARCH FOR SILVER.

CHAPTER XI.

EARLY in 1876, the reported discovery of a silver mine at Mount Rangitoto, in the Totara district, created quite a *furore* in Hokitika and throughout the whole of the southern portion of the West Coast. It had been reported that a rich lode of silver had been struck by some lucky prospectors, that a small quantity had been forwarded to Melbourne for assay, and that the reports received were of the most glowing character, far exceeding all expectations. For some time the excitement regarding the discovery was intense. Here, it occurred to me, was an excellent opportunity for an exploring ramble to the mountain-top, another holiday exploit on the Golden Coast, in search of a second metal—silver. Not that there was apparent reason for doubting any portion of the statements made by the prospectors in respect to their discovery of a silver mine, but simply from a feeling of curiosity, and a belief that an intimate acquaintance with the facts and circumstances to be obtained by a personal inspection of the ground would be more convincing than the most reliable testimony of those who might be more directly interested in the value of the discovery than myself, I resolved upon visiting the then newly discovered Rangitoto silver mine.

Meeting the prospectors, James Palmer, James Bevan, and Edwin Kenway, on the Hokitika race-course on the 13th of March 1876, I arranged to start for the mine on the following morning, in company with any of the party who would consent to take the part of guide. Palmer, who had already been designated by his working mates as the captain of the party, accepted the position, and we closed an agreement of partnership for the limited term of one week, more or less, with the several conditions that, provided always, etc., the creeks and crags, and all manner of things adjacent thereto, which were described as "middling rough," and that such means and ways as are regulated only by the ethereal elements, should favour so early a dissolution between us. This we concluded, not by affixing our autographs or seals, but in presence of two attestors, with whom we retired to Hansen's booth, after losing a sweep on the previous race, to pledge in wine and words, if not in deeds, the fulfilment of the contract. The two witnesses to this agreement were Peter Adamson, formerly of Okarito, and Robert Acres, or better and favourably known in those days as "Waitaki Bob," both of whom subsequently became our travelling companions, as well as our sleeping partners, as will hereafter be narrated. Next morning found Palmer and myself, true to our pledge, on board the Ross mail coach at nine o'clock. After leaving the Post Office we were driven round to the Cleveland Hotel, in Revell Street, where our party was further augmented by the presence

of Mr John Hudson, making our number five in all, two of whom had their own steeds to carry them as far as the Waitaha River.

Between Hokitika, Ross, and the route thence by beach to the mouth of the Waitaha River, a distance of about thirty miles, little of special interest is presented. The only good view of scenery worthy of record along the twenty-one miles of coaching, is met with after crossing the Hokitika River by the Kanieri punt, upon ascending the hill, where the river, and the Kokatahi, and Han Hau districts are brought in sight, furnishing one of those pleasing landscapes with which the coast so abounds. A geological curiosity on the way is the Half-way Stone, being an enormous block of granite standing above and closely adjoining the main road. A similar boulder, measuring, at a rough guess, about 100 ft. in circumference by 50 ft. in height, is passed at the Waitaha Bluff, close to the surf. The presence of such prominent objects in these positions can only be accounted for by glacial influence, as they are dissimilar in vein and grain to any of the stones in the surrounding neighbourhood. Such stones are not unfrequently met with at higher levels on both sides of the central mountain range of this island, but the deposit of these at such a distance from the great mass of primary rocks would seem to prove that glaciers in past ages must have been more powerful and far-travelling forces than existing samples of the coast would lead one to suppose. However, as the theories thereanent have been exhaustively discussed by Dr Hector in a paper read before one of the London Societies, there may be better opportunity for settling the birth-place and early life of these monster blocks by perusing his paper than by depending on any of my crude suggestions. Apart from such occasional curiosities, the drive along the Ross road is only remarkable for its extreme monotony, reminding one of *Punch's* panorama of a voyage across the Atlantic, in which the stern of the steamer is exhibited as the one visible object. The traces of the coach got unhooked two or three times and dangled against the horses' hind hoofs, but the horses preferred stopping until the matter was rectified, rather than furnish even a "hairbreadth escape" paragraph to enliven the journey. A short stay at Ogilvie's, and the gratuitous supply of a basket of fruit to the passengers by Mrs Muir, as we passed her garden a few miles from Ross, the apples and peaches furnishing ample proof of the adaptability of the soil and climate of the district, were the only incidents on the way until we reached Ross, which but a few years previous was the most thriving place on the coast, yielding from its rich soil thousands of ounces of gold per week—where so recently the banks by day and the casinos by night were scenes of money-changing and "bustle"—and which presents now a very different picture. Had we entered the town preceded by two black in place of brown horses, and at walking pace instead of under full whip, and robed ourselves with white hat-bands, we should have been more in uniform with the appearance of the main street on the 14th of March 1876. But surely there is on the face of the Totara horizon indications of a brighter lining to its long dark clouds. With the prospect of the completion of the Mikonui Race, which is its greatest hope, its downward commercial course should shortly present a turning point. The

working of the great mining claims, which are expected to be in full operation in a few months, should give dividends to its shareholders for many years to come. But I am diverging somewhat from the narrative of my trip.

Starting for the beach, we passed through Donoghue's, and had an opportunity of seeing the extent of damage done there by the recent flood. Long stretches of fencing have been carried away, and numbers of gardens have been laid waste. The loss must be considerable to many who had made their houses comfortable, and who were previously, to all appearance, in no danger of either flood or tide. Passing along, we crossed the Mokinui by boat, and shortly met a drayman, who informed us that a party of surveyors had preceded us, bound for Mount Rangitoto, for the purpose of surveying some of the other sections adjoining that of the prospectors, applied for at the last sitting of the Lands Board. Upon reaching the Mokinui River, Mount Rangitoto presents itself in a line directly behind the Koh-i-noor claim, and from that point we have the first opportunity of contemplating our next day's journey. Along the beach there are a number of small farms, and some dairymen settled, and apparently contented. The Waitaha Bluff is passable at any time, and at low water drays frequently traverse it. A short distance beyond Bald Head, or nine miles from Ross, Allen's homestead is reached. Here we settled for the night. Mr Allen has a very large and comfortable accommodation house, besides several extensive paddocks under cultivation. No settler in the southern part of the Province has worked harder during the past ten years to get around him a comfortable home, and he appears at last to have achieved his object. Horses and cattle are to be numbered by the score around the buildings, and with a probability of an increase of population near the locality, his perseverance should meet with the reward it deserves. Extensive improvements have been made on the farm, and the clearest evidence is given that farming and squatting, if conducted with care and attention, along the many rivers on the southern beaches, should prove to be a remunerative occupation here as it is elsewhere.

We made a start from Allen's on Wednesday morning about eight o'clock, equipped with provisions sufficient to last us for several days. In addition to our own party, there were other five in company at the start, but the heaviness of their swags, as compared with ours, compelled a separation before we had gone far up the first hill. Four of these belonged to the survey party, and the fifth was a traveller from Reefton, whose precise mission was unknown to us. He stupidly left without change of clothing or any supply of provisions whatever, and, but for the kind attention bestowed upon him by the Samaritans among the mountains, he would have fared badly indeed. From Allen's to the Gorge, a distance which occupied about two hours to travel, each of our party, with the exception of Palmer, had the benefit of a saddle horse. Palmer might have availed himself of like service, but he was indifferent to a ducking. I shared my nag with Hudson, and we jogged along in this way, alternately in single and double file, singing airs appropriate to the situation, and all joining in such a chorus as "Marching through the Waitaha," or listening to a Scotch solo from Adamson upon those who were wont to

"paidle in the burn." We had to cross the river in all seventeen times. There had been very little rain for some days, and consequently the river was at its lowest. About two and a half miles from Allen's, and after crossing the river the sixth time, the Main Ross and Bowen Trunk Road is met with. My innocent impression of the so-called "Main Trunk Road" was, that it was a dray road, that any machinery requisite for the development of silver mines could be conveyed with ease and certainty thereon, and that a branch road would be all that would be required to make a complete thoroughfare. This is not so. The road is a mere foot track, barely worthy of the name of pack track, and at present its termination is like that of a telegraph wire or lightning rod, simply running into the hill, and presenting an appearance as if the workmen had gone to dinner and forgot to return. The land in this direction is very lightly timbered, and good soil is to be seen along the river bed all the way. The last two crossings are tolerably deep with rough bottom, but the current is not so rapid as to involve any danger, unless the river is flooded. Reaching the landing place at the Gorge, we sent our horses back with Allen's man, arranging with him that he should meet us at two o'clock on Friday afternoon at the same place. This starting or landing point can scarcely be missed by any travellers going this way. It is on the north side of the river, immediately at the base of the mountain. In the ordinary travel of a pack horse, the distance thither should be accomplished in a couple of hours or a little more. As we wandered along the river it was observable that nature had provided in abundance many of the sustenances of life. Fish were plentiful in the river, and pigeons and ducks were in large numbers along the shore. Hitherto our travelling was all pleasure and child's play, but from the hour of 10.45 a.m. until 5.45 p.m. it partook of a very different description. Infants will not be likely to participate in the game. Men may try it and accomplish it once; but in the absence of a gold or silver mine becoming their own inheritance at the termination of the journey, they are not likely to be caught indulging in it as a constitutional exercise. Palmer complacently chaffed us about the "gentle rise" of four hours without intermission which we would encounter. His "gentle rises" out of us were manifold. They might better be described as a succession of perpendicular break-neck hills, calculated to represent, from a draper's point of view, at least five pounds per head, and from a bootmaker's, twenty-five shillings. By the way, those in the trade would do well to present the prospectors with an entire rig out for themselves, wives, and families, should the present track be the only one in use for the next six months. They might petition the Government to that effect also, and bestow the same compliment on the Provincial Executive with great gain. Hudson was the first to take a farewell greeting with the lower portions of his nether garments. He strove hard to maintain the bond of union between himself and them by means of flax and yarn, but at the expiration of three hours he could compete with any of the Mongolian race for shortness of skirt. Indeed, at the top of the mountain there was no one curious enough to inquire—

> "Ye gods and little fishes,
> What's a man without his breeches!"

for there stood at least four living homogeneous illustrations of the signification of the term.

Midway up Mount Rangitoto we came on to Mr Frew, Surveyor, and his two mates, who had pitched upon a camping ground for the night. They had gone from Redman's by the Bowen road, and struck in at the foot of the mountain. They were on a prospecting mission for silver, and intimated their intention of putting in their pegs if they met with any of the ore outside the prospectors' boundary, in which case they would come to town to oppose the granting of the lease if the said ground had been applied for. We reached the highest peak of Mount Rangitoto, 3100 ft. above sea-level, at a quarter-past three. Here we had, in vessels more appropriate to the situation than to the conception of the poet, some of "the cup which cheers but not inebriates." We were not by that time the possessors of any mountain dew in its fermented state. "Forward," cried the Captain, and away we went with a fresh spurt down hill through thick scrub, intermixed with supple-jacks, lawyers, spear-grass, and patches of flax. Though bruising and peeling shins were ordinary occurrences, anything was found to be a relief from the incessant climb. The muscles of the feet and thighs became relieved by the reverse action required on the downward slope. However, this did not last long enough. Another hill or two and we reached our camping ground for the night, where the prospectors had pitched their tent. Here we arrived at a quarter-past five, after a seven hours' tramp from the foot of the mountain. Our camping ground was 2700 ft. above sea-level. These altitudes were ascertained when Mr Cox, the Surveyor, visited the place some weeks ago. From this spot to the mine is 700 ft., down what has been called Mine Creek. We thought, however, we had done enough, if not too much, for that day, so we resolved on making the 6 by 8 tent our camp until next morning. As our Captain had nearly "cooked our goose" already, he volunteered to prepare some bacon in like manner; indeed, he affirmed that, while in camp, though fully cognisant of the fact that he stood there a man of means, upon millions of pounds worth of his own metal, he recognised and possessed "metal more attractive" in the frying pan and billy, and he could also discover without much difficulty that he was likely to be unopposed in obtaining the permanent appointment of chief cook, in addition to his other title.

Our camp was dry and comfortable. The dried ferns on which we were to sleep—"perchance to dream" of silver—presented a promise of coziness of seven hours, as against the previous seven among slippery stumps and ruts. Our cook so acquitted himself over our first meal—its preparation, not its consumption—that he was awarded a first-class verbal certificate from all hands. Shortly after supper one or two of us might be seen after the custom of the natives in their whares, whiffing our clays in front of the large fire, with a blanket as the sole outside covering, while the tattered fragments of our ordinary outer garb were also to be observed smoking on the flaxen fixing alongside. Soon we retired, to be packed like herrings in a barrel. In a 6 by 8 tent there is not much opportunity for a man of 6 ft. or more having indulgences in violent nightmare,

without seriously disturbing one or other of his four mates; neither is he likely to be looked upon as a very appreciable or cheerful companion if heavy snoring is found to be one of his prevailing propensities; but one of our sleeping partners displayed a weakness in the latter direction. I happened to be comfortably ensconced as the centre man of the party, and being thus awoke before daylight, I attempted to rise to discover the snorer, but I found that my two nearest mates had each an arm round my neck. These two were benedicts, you may be sure. One of our mates again had silver on the brain while he slept. He certainly had silvery locks, but precious little on the summit of his cranium or around the brain, whether the same had been reduced by natural wear or wedlock tear. He told us he dreamt he dwelt, not "in marble halls," but in a silver cave. He didn't cave, but dug, and not in vain, for he discovered a solid vein of virgin silver. He disposed of his plated wares, and substituted o'er his threshold the real ore instead. His better half had many domestic cups and new measures, requiring much silver. Such was his narrative.

But my readers must be wearying for an account of the mine. To it we started on the following morning. Down the creek a distance of 700 ft., half of which is covered with thick timber, the lower portion being heavy boulders, over which we had to do our spiriting with exceeding gentleness, for fear any one should lose the number of his mess. There we saw, in pleasant reality, sufficient corroborative evidence of what the prospectors had stated they obtained.

The object and terminus of our journey were reached by us on Thursday morning, at nine o'clock, and, had the weather been at all propitious, it was our intention to have visited as many of the adjoining creeks and sections for which leases have been applied as we could have accomplished during that and the following day. I also hoped I should have been enabled to have had a sufficient, though cursory, glance at the surrounding country, to have spoken more definitely of the position of the mine in respect to its connection with the Bowen road. In this, however, I was entirely frustrated, owing to the prevalence of thick fog and heavy rain during the greater part of the day, and could not form anything like a correct or reliable opinion, though there can be little doubt that a shorter course is certain to be found than the round-about and rugged track we had just traversed. After descending, as I have already stated, 700 ft. of Mine Creek—which creek, during ordinary weather, is a very small tributary or waterfall, emptying itself into the left-hand branch of the Waitaha River—we reached the outcrop of the galena ore. Here it appears cropping out of the mountain with a thickness of only two or three inches. From that point the vein is easily traceable without any break for a distance of between 40 and 60 ft., thickening gradually as it is followed, until it reaches a thickness of nine or ten inches. A few feet from where the vein is first visible, it appears to have an inclination of dipping from east to west, at at an angle roughly of about twenty degrees to the westward, but on proceeding further along the line of the ore, and reaching what we may term for the present the main lead —that is, where the vein is nine and ten inches thick—there is a fall in the lode, and

the dip appears to be tending southward, at a much greater angle—an angle of about sixty degrees. The vein disappears into the hill, and at the thickest portion a large quantity of *débris* has fallen apparently from a recent land-slip. Palmer informed us that under this *débris* the vein was exposed at a thickness of 3 to 4 ft. I should have no reason to doubt this statement, but judging by the manner in which it is dipping and gradually thickening as it goes into the hill, should accept such as highly probable, more particularly as I found in every other respect that the statements of the prospectors were fully verified. To ascertain this, however, would not cost the shareholders or a company any large amount, as the whole of the *débris*, I dare say, could be sluiced away by hydraulic power, and this is one great advantage for the future working of the mine, that a plentiful supply of water can be obtained from either of the two creeks, only a few yards apart from each other, and which unite close to the mine. The vein of galena, containing the silver and lead ore, is imbedded in a layer of ferruginous quartz in clay slate. Below and above the vein the reef is soft, and offers little or no resistance to the extraction of the metal. Even at the present time, without any other than the common appliance of a pick, a man could knock out two or three hundredweight of the metal in a few hours. We contented ourselves with half a dozen specimens each, which were obtained with the greatest ease, and there is no necessity for, or apparent benefit from, picking the pieces, as all along the thickest part of the vein there is little or no dissimilarity in its parts. Above the lode, about 50 ft. or so, is a thick reef of white quartz, and beyond that again, to the summit of the hill, is the granite rock. In the course of a few minutes Palmer took out about thirty pounds' weight of ore, which he brought to town. I may state also that there are from three to four tons of the ore already heaped up on the side of the cliff, ready at any time to be taken to town, or to be smelted on the ground, whenever means or ways are provided for ascertaining its value, or reducing it to pounds or shillings sterling. To the right of the creek the prospectors have put in a tunnel of 16 ft., thinking to catch the lode, but in this they were not successful. They subsequently sunk a shaft of about 10 or 12 ft. in the same direction, and have cut the vein about the same thickness, thus proving that the metal exists on both sides of the creek, besides being visible in another vein in the bottom of the creek.

Being satisfied that the ore in quantity is there, so far as can be judged by the amount of work yet done, my next desire was to become equally convinced as to the quality. With that view I took half a dozen fair-sized pieces promiscuously from the mine, not from one block, but from various points along the lode. Each specimen I carefully marked and brought to town.

There are four distinct galena reefs exposed on the prospectors' ground within a distance of three to four hundred yards, and there are likewise indications of copper in two places on the same lease. Three or four samples of the copper ore were taken down by Palmer, and were left at the office of Mesrs Pollock & Bevan, in Wharf Street. I took down a small sample of the copper ore, and likewise one showing a large quantity

of malachite on quartz, found about a hundred yards from our camping ground. In the galena there is evidently a large proportion of sulphur. We put one of the pieces on the fire at the hut, and it gave forth a blue flame with a suffocating sulphury odour. The bed of the creek at the mine smells strongly of it for some distance.

While I left my four companions for a time examining the silver mine, and each picking out a few specimens for his own particular purpose, I went on a Pickwickian ramble among the rocks examining the little pebbles in creeks and crevices, in the forlorn hope that a ruby or an opal or some precious stone might meet my view. For the period of fifteen minutes, more or less, I desired to be a prospector and a discoverer. I felt as if I could be contented were I happening to stumble on a small diamond field on my own account, or were I to be confronted by a female moa feeding about, followed by one or two of its offspring. Gold and silver will be so common in Westland, between the Taipo and Mount Rangitoto discoveries, that we shall be obliged to quit these regions or prospect for something new. Diamonds and moas would afford novelty and variety. Whilst I was thus meditating, my mates were doing the baptismal honours to the mine, but as I was not present, I am unable to furnish a reliable report of the ceremony. I was informed, however, on their return to the tent, that they scooped out a silver cup and christened the mine after the manner of men, in pure water, bestowing on it the name of its parents, the Prospectors. Hudson, I was told, assumed the clerical office for the time, and dilated somewhat after this manner. He addressed the assemblage—they were three in number—by the name of "brethren," and he regretted to think that it was out of his power to request them to partake of any other than of the pure ethereal. They had been Good Templars by force of circumstances, and no one regretted this more than himself, unless it was "Waitaki Bob." He directed their attention to the great moral set forth in the mine, the mountains, and the kilts they stood in. He thought these presented evidence of the magnificent and munificence of nature, but of the insignificance of art in that neighbourhood; in short, in their shorts, they must feel the need of a tailor on Mount Rangitoto. They might be compared to the "three tailors of Tooley Street," and well they could in one sense, for their views were the views of the whole mountains and the people thereof, but again in another sense they had not a needle amongst them. They were welcome, as did their fathers of old, even before the days of Lazar, to take pieces and shekels of silver, and they were to drink, but he defied them to become drunken. In the name of Palmer, Bevan, and Kenway, he then christened the mine, and shortly after the echoing chorus was sounded of "Home again" while the party were seen scrambling up the creek.

Shortly after assembling together again at our Camp, the Survey party and Frew and party reached us. They were wet and weary enough, most of them being obliged to carry heavy swags. Then did it commence to rain and blow in all earnestness. I question very much, if Anthony Trollope had been there with his advice "don't blow," that it would have been effective in saving our fire-fly. It did fly. I made a series of sublunary visions out of a small hole in the hut, and could distinguish no more

comfortable reposing place than between a pair of blue blankets under the calico roof. I dropped across Lamborn's work on Metallurgy stowed away in a corner. From it I made myself acquainted with many descriptions of ores, their various assays and treatment, and I learned something respecting the valuable constituents of silver and lead. To silver miners and prospectors who may not have read this work, or that of Dr Phillips on Mineralogy, I would recommend their perusal. Dr Phillips says that we are not sufficiently advanced in our knowledge of chemical geology to warrant an attempt to form any general theory of the formation of mineral veins. We need not attempt, therefore, to lay down the theory whereby we may condemn or uphold the value of the discovery of Mount Rangitoto at this early stage. But I cannot refrain from noticing that, in respect to its position on the west side of the mountain, and in regard to the other details of colour, structure, and composition of the rocks and the mineral itself, it compares pointedly and exactly with the descriptions given of many of the oldest silver mines in the world. Then, as to the value of the ore, it compares most favourably, assuming Mr Kirkland's assay to be correct, with the richest of the known mines at the present day. The most remarkable silver mines, we are told by these authorities, are in Frieberg in Saxony, Kongsberg in Norway, and Huantaya in Southern Peru. The largest specimen ever obtained was got in Peru, weighing eight hundredweight. All the silver produced in the United Kingdom is extracted from argentiferous lead, and in the North of England, mines are worked which yielded as low as $1\frac{1}{2}$ ozs. of silver per ton. In the Isle of Man the average is between 50 and 60 ozs. of silver per ton of lead. In Cardiganshire and Montgomeryshire, the average is between 15 and 25 ozs. per ton. In the Kongsberg mines in Norway, where silver was discovered as far back as 1623, the mines are a hundred miles long by fifty miles in breadth. There, we are informed, the iron pyrites was decomposed and gave rise to the formation of hydrated oxide of iron, the presence of which was the first indication of silver in Kongsberg. There, as here, nearly all the ore-bearing hills run north and south. They are irregular in their dimensions, but all preserve a certain degree of parallelism with each other, and the silver is traced, as I have said, for miles on the west side. The largest silver vein in Mexico is 200 ft. in width, but the majority of the veins, we are told, commence at a few inches in thickness and extend sometimes to 6 or 8 ft. The mean average produce of the Mexican mines, as estimated by Dr Phillips, is a little more than 50 ozs. per ton. The average richness throughout Saxony is 60 to 70 ozs. per ton. Though I do not profess to know aught of geology to determine —what, indeed, would be an exceedingly difficult problem even to modern geologists—the relative ages of the rocks on this coast, or to assign their position in the geological series, I feel assured if a geological report were given by some competent person, it would be shown that similar formations and indications exist here to those of most of the silver-bearing countries mentioned. The first great question to determine with regard to this new discovery is, whether these similar veins are thickening still further in the dip, and whether they will become concentrated in one enormous

ode. Such were my meditations until I became entranced by the captivations of Morpheus.

On Friday morning, our Captain acquainted us with something respecting the moon's quarters. He meant that we should no longer have quarters there. He said one thing appeared clear, if not the hills. We were all in a fog. During the night, I may mention, we heard the notes of the kaka, the kiwi, and kakapo. At early dawn we heard Mr Frew imitating every imaginable live bird and animal belonging to the farm-yard. We presented him with a tin of preserved milk, as an accompaniment to his only beverage and sole article of food—burgoo. After breakfast we christened the embryo town by the name of Silverton, giving three cheers for the prospectors. The pleasure of the homeward journey was only marred by the inclemency of the weather. In about five hours we reached the foot of the hill, where we met Bill, one of Allen's men, who had kindly waited for us, according to promise, with four horses. At six o'clock we reached Allen's, where our comforts were again attended to. Later in the evening Bill suggested, in honour of St Patrick's night, that the occasion should be suitably celebrated. Allen happened to have two new-chum servants by name Phil and Peggy. Phil could cause dulcet strains to emanate from a family fiddle which had been an heirloom for three generations, while Peggy was "all there" in what she termed in other words than the terpsichorean fantasias. After our travels over the "rocky roads," nothing would do but that we should open the ball. Peter Adamson and Peggy were our *vis-à-vis*. Full dress was not imperative, so we left our coats and boots to dry, while Phil

"Struck up a lilt so gaily."

Suffice it to say, for three hours Good Templarism was not the chief topic of conversation. Irish jigs, Scotch reels, and songs of all nations were only stayed in their rapid course when interspersed by stirrup-cups. Next morning Waitaha to Ross, and thence to Hokitika.

Ere next I see the silver lode,
May Government provide a road!

At a later period in the same year, Mr John Bevan was more fortunate in regard to weather, in an excursion made by himself and others to the silver country, and in a narrative of the journey, he thus described the scenery from the summit of Mount Rangitoto :—"Every sense is alive to the beauty of the scene. Looking inland from the sea along the chain of mountains, one first beholds 'Mount Cook,' the ever hoary-headed giant of the south, rearing aloft its snow-clad heights, 13,000 feet above the level of the sea, the monarch of all, the greatest land mark in New Zealand, and alongside of which all others seem insignificant, but none the less grand in the glorious picture presented.

"To the south and immediately at the base of the point of observation, one sees the valley of the Waitaha, Duffer's lake in its solitude lying still and motionless, enclosed by high mountains. The rivers 'Wanganui' and 'Wataroa,' 'Bald Head' and 'Wanganui Bluff,' the scene of many of Ocean's mighty furies and the terror of the

traveller at times, when trying to get round its perpendicular and iron bound cliffs, and as far as the eye can reach one beholds headland after headland laved by the mighty Pacific Ocean, the white fringe of its ever restless surf looking in the sunshine like a silver thread upon the storm-beaten shore.

"To the north a similar but less imposing scene presents itself. The peaceful valley of the Mikonui at the base. The river Totara, Lake Mahinapua in the distance, with a glimpse of the Hokitika River and some portion of the town, the long stretch of sea shore for many miles, a few habitations here and there, and at length closed in by 'Point Elizabeth' stretching out into the sea, a few miles north of Greymouth, completes the view.

"It is impossible for me adequately to describe such a glorious panorama, for the point of observation being within a few miles of midway in Westland, one obtains a view of nearly the whole of the Province. It requires the descriptive powers of a Chevalier, or a Von Guerrard, to do justice to it; and if either of these celebrated artists could behold it under such favourable circumstances—a cloudless sky, the sunshine dancing in the foliage, on the glittering bosom of the restless and azure deep, over the rippling river falls, on the still waters of the silent lake, and marking in bold lights and shades the prominent and time-worn features of every mountain in the Southern Alps,—could not fail to enrapture and create at once a response to the demands upon his talents, by repeating the scene in miniature with all its beautiful details."

Turning from the descriptive to the practical, I regret to record that the great hopes, entertained by many, of the Mount Rangitoto silver mine, have not yet been realised. A company was formed with a nominal capital of £30,000, £19,500 of which was subscribed in shares of £5 each, the balance being apportioned to the original proprietors. The capital was all expended in prospecting the ground and developing the mine. The original lode was lost, though several other lodes were met with in the drives, carrying more lead and less silver. Eighty bags of the ore were shipped to Messrs Vivian & Son, of Swansea, and several lots were shipped to Australia. In 1882, Mr Bevan, one of the original promoters, went to England with the object of inducing English capital to be invested in the further development of the mine. He reached London at a time when heavy losses were reported to have been made in the Indian mines, and was unsuccessful in floating his projected company. Five hundred acres of freehold land, a crushing plant and smelting apparatus, are all that remain of the first silver mine venture on the coast. The strong but neglected constitution of poor Palmer broke down, and he has taken the final march, in front of his mountaineering companions, to that goal whence no one returns. The end of "Waitaki Bob" was still more sad. He died in the Sea View Asylum at Hokitika.

HOKITIKA AND CHRISTCHURCH ROAD

GOVERNORS' VISITS.

CHAPTER XII.

SIR GEORGE GREY, K.C.B., was the first Governor of New Zealand who paid the West Coast a visit. On Thursday, the 24th of January 1867, His Excellency reached Hokitika, having made the journey overland from Christchurch on that and the previous day. These being the palmiest times of the coast, you may be sure the Governor, who was very popular, received a most hearty welcome at all the places he visited. A procession, consisting of the Hokitika Corporation, the Masonic body, the Oddfellows, the Fire Brigade, and others, was formed, and, preceded by a band of music, met His Excellency at the outskirts of the town. On his arrival at the first triumphal arch he was received with loud cheers from an immense concourse of people. He was introduced by His Honour the Superintendent of Canterbury, the late Mr Moorhouse, to the first Mayor of the town, Mr Bonar, and the members of the Corporation. His progress through the town was a complete ovation. At all the principal points on his route he was received with acclamations, and having passed under six triumphal arches, entered Mr Sale's residence shortly before seven o'clock. In the evening the streets were brilliantly illuminated, and His Excellency, notwithstanding the fatigue which he had gone through, took a walk through the town on foot, accompanied by Mr Justice Gresson, and wherever he was recognised, was loudly cheered. Next day His Excellency entered the Supreme Court House, which had been specially fitted up for the occasion, to receive addresses and hold a levee. At that time, besides His Excellency, there were assembled in the Court House, the Rev. F. Thatcher, Major Grey, Captain Home, the Hon. Major Richardson, His Honour the Superintendent of Canterbury, His Honour Mr Justice Gresson, T. S. Duncan, Esq.; G. S. Sale, Esq.; Archdeacon Harper, His Worship the Mayor, and others. The Town Clerk, the late Mr John Lazar, presented an address of welcome. The address set forth, among other things, that only two years previous, the town was "an unknown and barren waste," but now it has risen to be "an opulent, thriving, and commercial town." Sir George Grey, in acknowledging the address, said his pleasure upon the occasion had been heightened by the remembrance of how little was known of this part of New Zealand but a few years since. He proceeded to say:—"It was then regarded as a dreary locality, difficult of access, hardly producing the necessaries of life, and as not likely to be inhabited by the European race until after a lapse of a long interval of time. Now I find around me a thriving and populous town, which has suddenly sprung into existence, an energetic population, already cultivating

the soil, which gives unmistakable proofs of its great fertility; an Alpine mountain chain, pierced by a great road, and signs of progress and prosperity upon every side." Addresses were presented by the Masons, the Oddfellows, and the legal profession. In the evening the town was illuminated in every direction, some very effective transparencies being displayed in Revell Street. I recollect one characteristic transparency at Charley Williams's. It was that of a digger with a large swag, supporting burdens in the shape of gold duty, taxes, customs duties, and warden's court fees. This attracted the attention of many passers. The whole town was a blaze of light, though candles and kerosene were the only means of lighting then available. A grand banquet was given to His Excellency the following evening, at the Prince of Wales Opera House. At the upper end of the theatre jets of gas and Chinese lanterns cast a brilliant light on the distinguished guest and his suite, and oil lamps all round lit up the remainder of the banqueting hall. The whole house was extravagantly decorated. Mr Bonar, Mayor, occupied the chair; all the guests before mentioned were present, and there was a large number of ladies and gentlemen in the dress circle. A most enthusiastic greeting was given His Excellency. Next day he visited the Kanieri and Waimea diggings, and proceeded to Greymouth by steamer "Bruce," where he visited the Brunner coal mine, travelling up on board a barge. On his return His Excellency held a levee, and a banquet was also held in the evening. The whole party returned overland to Christchurch by special coach, after remaining on the coast about a week. This was the first recognition of "The Golden Coast" by a governing representative of Her Majesty.

Ever since that time the name of Sir George Grey has been popular with the bulk of the inhabitants on the coast. In later years, when Premier of the Colony, he again paid the several districts a visit, inquiring into the wants and requirements of the people. He held a monster public meeting at the Theatre, and was enthusiastically received.

Before taking leave of Sir George Grey in connection with the coast, I may note that in his work entitled "Polynesian Mythology, and Ancient Traditional History of the New Zealand Race," some additional records are given to those contained in my first chapter, respecting the first of the native race who landed on these shores. He gives a brief account of the landing of Ngahue, the native chief, at Arahura, confirmatory, in many particulars, of what has here been related from other sources.

The next Governor who visited these parts was Sir George F. Bowen, K.G.C.M.G. Early in February 1871, the West Coast was promised a visit from His Excellency the Governor. But circumstances over which, in common with ordinary mortals, he had no control, prevented the landing of the Vice-Regal party, in which so much interest was properly taken by the popular representatives in the chief towns in Westland. He was compelled, through stress of weather, to pass the ports of Westport, Greymouth, and Hokitika, in the s.s. "Clio," and first visited the Sounds. On the 12th of April of the same year he returned to Westland by the route which was calculated to gratify his somewhat poetic tastes—the trans-Alpine track, or, as it is now commonly and more appropriately called, the Christchurch Road. I will first describe the reception he met

with in Hokitika, and will thereafter furnish his own description of the Sounds, as delivered by him in an address to the New Zealand Institute.

The public demonstrations on this occasion fell far short of those which were organised on the occasion of the visit of Sir George Grey. The population of the town was not, either numerically or in respect to its wealth or its extravagance, what it was in 1867. The journey overland was made in one of Cobb & Co.'s large coaches, drawn by six handsome horses, and driven by one of the proprietors, Mr Burton. His Excellency's fellow-passengers on the road were his aide-de-camp, Captain Pitt, and Mr Rolleston, Superintendent of Canterbury. A large procession met His Excellency at the north end of Revell Street, headed by the Hokitika, Ross, and Stafford brass bands. Three hearty cheers were given for His Excellency, who addressed the assemblage, and was afterwards escorted to Government House. In the evening the town was illuminated. The building best illuminated was the Bank of New Zealand. In front of these premises there was a large transparency representing a New Zealand scene, with a Maori in the foreground. There were several others bearing inscriptions, "Success to Mining," "Prosperity to New Zealand," "Welcome, Sir George," and "Advance, Westland." At the Royal Mail Hotel there was a representation of Neptune as the centre figure, round which were inscribed the words, "Welcome, Sir George Bowen." Mr Holmes, Revell Street, exhibited a transparency bearing the words "Advance, Westland," and another, typical of Britannia. Red and blue fire and rockets were the order of the night. Next day the Governor held a levee, visited several parts of the town and principal public buildings, attended the races, and patronised a bazaar in aid of the Wesleyan Church. Before starting for the races, he was presented with addresses from the several public bodies. The address from the Borough Council was signed by the Mayor (Mr Higgin) and the members of the Council. In acknowledging this address, the Governor, amongst other things, pointed to the gratifying fact, apparent from the official statistics, that this single county of New Zealand, in the seventh year of its settlement, had already a larger revenue and trade than many entire colonies, such as Antigua, Bermuda, and Barbadoes, which had been colonised for over two hundred years. It is also worthy of mention that His Excellency received one other address—a poet's welcome, or, as it was printed, "The Poet's Welcome"—a politico-poetic production by Mr John Cross, the recognised Poet Laureate of Westland. The afternoon was spent by His Excellency on the grand stand of the race-course. The weather was delightful, the crowd numerous, refreshments abundant, and the racing good. Next day His Excellency visited the Kanieri district, and attended a banquet and ball in the Town Hall, Hokitika, in the evening. Subsequently he visited Totara, Stafford, Waimea, and Greymouth, from whence he took his departure by the steamer "Luna." I was nearly omitting to mention that Mr Lahman (now the Hon. H. H. Lahman, M.L.C.) was County Chairman during the time of Sir George Bowen's visit, and accompanied His Excellency to the several districts within the county. At Greymouth, Mr E. Wickes did the honours in his capacity of Mayor of the Borough. Four hundred

children and an immense concourse of adults met His Excellency at the town boundary, and the citizens' ball in the evening was an immense success. The visit throughout was of the most hearty and loyal nature, and during his short stay His Excellency elicited everywhere a strong feeling of popular friendship. Much more might be written of the doings in the inland towns, of addresses presented, of claims and engines and water-races christened, and of luncheon speeches, but I prefer giving place to His Excellency's interesting narrative of his adventures at the Sounds, to which I have, in an earlier part of this chapter, made reference.

After returning from the coast, at the next annual meeting of the New Zealand Institute, Sir George Bowen, as President, delivered the following address, which gives a minute and graphic description of his visit to the West Coast Sounds:—"I now proceed to give a short sketch of my visit during the months of February and March, in the present year, to the magnificent, but hitherto little known, Sounds on the South-West Coast of the Middle Island, whither Commodore Stirling conveyed me in H.M.S. 'Clio.' Dr Hector accompanied us; and had it not been for the disaster which befel us in Bligh Sound, we expected to have been enabled to collect much practical information respecting that part of the Colony, and also to furnish fresh and valuable notices to the Geographical, Geological, and Zoological Societies of London. It may here be mentioned that the best general descriptions of the South-West Coast of the Middle Island which have hitherto been published will be found in the *New Zealand Pilot,* compiled chiefly by an honorary member of our Institute, Admiral Richards, F.R.S., the present Hydrographer to the Admiralty; and in a paper by Dr Hector, printed in the thirty-fourth volume (for 1864) of the *Journals* of the Royal Geographical Society. The notes which I shall now read to you were written while the 'Clio' lay disabled in Bligh Sound, and have been partly embodied in my despatches to the Imperial Government.

"We left Wellington on the 4th of last February, but the 'Clio' was much delayed at first by baffling winds, and afterwards by a strong contrary gale, with heavy sea. We reached Milford Sound on the 11th, and remained there, examining that extraordinary inlet, until the 17th February.

"Admiral Richards has observed that the only harbours of shelter for large ships along the West Coast of the Middle Island of New Zealand (a distance of five hundred miles) are the thirteen sounds or inlets which penetrate its south-western shore between the parallels of 44 and 46 degrees south latitude, including a space of little more than one hundred miles. They are, counting from the north, and according to the names given chiefly by the adventurous whalers, who alone have frequented these inhospitable regions, as follows:—1. Milford Sound; 2. Bligh Sound; 3. George Sound; 4. Caswell Sound; 5. Charles Sound; 6. Nancy Sound; 7. Thomson Sound; 8. Doubtful Sound; 9. Daggs Sound; 10. Breaksea Sound; 11. Dusky Sound; 12. Chalky Sound; 13. Preservation Inlet. As I wrote to the Secretary of State for the Colonies, these arms of the great southern ocean, cleaving their way through the massive sea wall of steep and rugged cliffs, reach far into the wild solitudes of the lofty mountains, which form the cordillera,

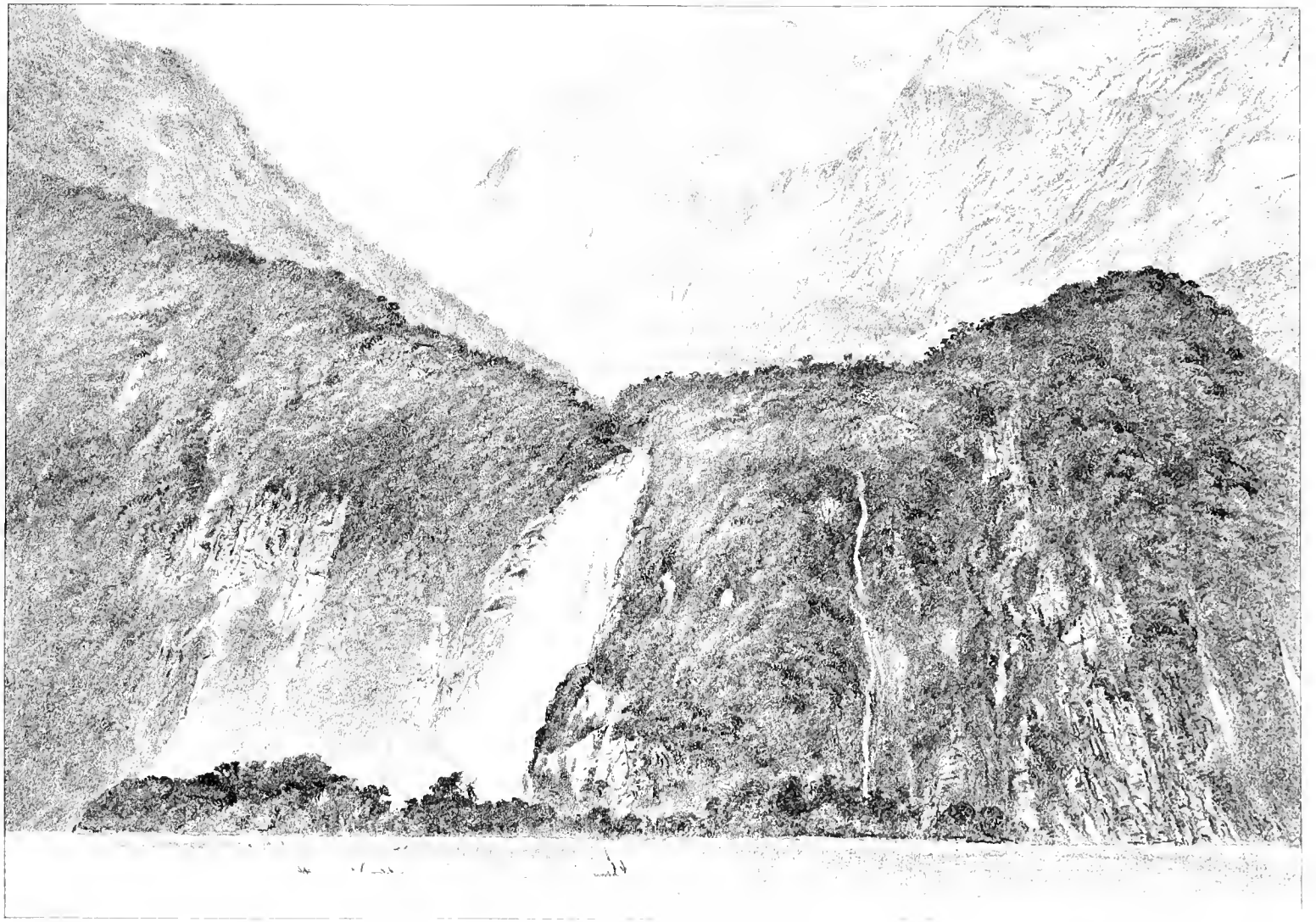
or 'dividing range' of the Middle Island. These mountains attain their highest elevation, further north, in Mount Cook, a snowy peak rising 13,200 feet above the sea-level, and visible in clear weather at a distance of more than a hundred miles to the mariner approaching New Zealand; thus forming a noble monument of the illustrious navigator who first recommended the planting of an English settlement in this country. To quote Admiral Richards:—'A view of the surrounding country from the summit of one of the mountains bordering the coast, of from 4000 to 5000 ft. in elevation, is perhaps one of the most grand and magnificent spectacles it is possible to imagine, and standing on such an elevation rising over the south side of Caswell Sound, Cook's description of this region was forcibly called to mind. A prospect more rude and craggy is rarely to be met with, for inland appeared nothing but the summits of mountains of a stupendous height, and consisting of rocks that are totally bare and naked, except where they are covered with snow.' We could only compare the scene around us as far as the eye could reach, north to Milford Sound, south to Dusky Bay, and eastward inland for a distance of sixty miles, to a vast sea of mountains of every possible variety of shape and ruggedness; the clouds and mist floated far beneath us, and the harbour appeared no more than an insignificant stream. The prospect was most bewildering, and even to a practised eye, the possibility of recognising any particular mountain as a point of the survey from a future station, seemed almost hopeless. The following extract from Dr Hector's account of Milford Sound shows the probable mode of its formation:—'Three miles from the entrance of the Sound it becomes contracted to the width of half-a-mile, and its sides rise perpendicularly from the water's edge sometimes for 2000 ft., and then slope at a high angle to the peaks that are covered with perpetual snow. The scenery is quite equal to the finest that can be enjoyed by the most difficult and toilsome journey into the Alps of the interior; and the effect is greatly enhanced, as well as the access made more easy by the incursion of the sea, as it were, into the alpine solitudes. The sea, in fact, now occupies a chasm that was in past ages ploughed by an immense glacier; and it is through the natural progress of events by which the mountain mass has been reduced in altitude, that the ice stream has been replaced by the waters of the ocean. The evidence of this change may be seen at a glance. The lateral valleys join the main one at various elevations, but are all sharply cut off by the precipitous wall of the sound, the erosion of which was, no doubt, continued by a great central glacier long after the subordinate and tributary glaciers had ceased to exist. The precipices exhibit the marks of ice-action with great distinctness, and descend quite abruptly to a depth of 800 to 1200 ft. below the water-level. Towards its head the sound becomes more expanded, and receives several large valleys that preserve the same character, but radiate in different directions into the highest ranges. At the time that these valleys were filled with glaciers, a great ice lake must have existed in the upper and expanded portion of the sound, from which the only outlet would be through the chasm which forms its lower part.'

"On account of the great depth of water in these inlets, and of the sudden storms of

wind rushing down from the mountains above, vessels are generally obliged to moor to trees or pinnacles of rock, whenever they reach a cove in which an anchor can be dropped. Accordingly, while we were in Milford Sound, the 'Clio' lay at anchor in Harrison's Cove, only a few yards from the shore, and moored head and stern to huge trunks of trees. Immediately above rose Pembroke Peak to the height of nearly 7000 ft., covered with perpetual snow, and with a glacier reaching down to within 2000 ft. of the sea. The lower slopes of the mountains around are covered with fine trees, and with the luxuriant and evergreen foliage of the trees, and the other beautiful undergrowth of the New Zealand forests. Two permanent waterfalls, one 700 and the other 540 ft. in height, add picturesque beauty to the gloomy and desolate grandeur of the upper part of Milford Sound. During a storm of wind and rain, mingled with snow and sleet, which, though it was the middle of summer, raged during three days of our stay, avalanches were often heard thundering down, with a roar as of distant artillery, from the snow-fields above; while a multitude of foaming cascades poured over the face of the lower precipices, hurling with them, into the sea, masses of rock and trunks of trees. On the other hand, nothing could exceed the charm of the few fine days which we enjoyed during our voyage. In his work, entitled 'Greater Britain' (Part 11, chap. ii.), Sir Charles Dilke has truly observed 'that the peculiarity which makes the New Zealand West Coast scenery the most beautiful in the world is that here alone, you can find semi-tropical vegetation growing close up to the eternal snows. The latitudes, and the great moisture of the climate, bring the glaciers very low into the valleys; and cause the growth of palm-like ferns on the ice river's very edge. The glaciers of Mount Cook are the longest in the world, except those at the sources of the Indus; but close about them have been found tree ferns of 30 and 40 ft. in height. It is not till you enter the mountains that you escape the moisture of the coast, and quit for the scenery of the Alps the scenery of fairy land.'

"Again Sir C. Dilke's description of the view from Hokitika at sunrise would apply also to the same view from many other points on the West Coast. A hundred miles of the Southern Alps stood out upon a pale blue sky in curves of gloomy white that were just beginning to blush with pink, but ended to the southward in a cone of fire that stood up from the ocean; it was the snow-dome of Mount Cook struck by the rising sun. The evergreen bush, flaming with the crimson rata blooms, hung upon the mountain side, and covered the plains to the very margin of the narrow sands with a dense jungle. It was one of those sights that haunt men for years.

"The neighbourhood of the sea, and the semi-tropical magnificence of the foliage, are features in which the New Zealand Alps excel the highest mountain ranges in Europe. As members of the Alpine Club, of England, have already scaled the peaks of the Caucasus, it is hoped that they will ere long explore the glaciers and summits of Mount Cook, together with the elsewhere unrivalled scenery of the neighbouring fiords. Mount Cook (as has been already said) rises to 13,200 ft. above the sea-level, that is, surpasses all but Mount Blanc and one or two others of the highest of the Alps of Europe.



MILFORD SOUND BOWEN FALL, 540 FEET

But the exploration of this giant of the southern hemisphere probably presents no unwonted difficulty to practised mountaineers, while it could not fail to add largely to the general stock of scientific knowledge. The present Secretary of State for the Colonies (the Earl of Kimberley) has, at my instance, invited the attention of the Royal Geographical Society to this subject. I have also to announce that the Admiralty, in consequence of my representations, intend to publish new and corrected charts, on an enlarged scale, of the West Coast of New Zealand.

"The 'Clio' left Milford Sound on the morning of the 17th February, and on the same afternoon struck on her port-bow upon a sunken rock, unnoticed in the existing charts, near the middle of the second reach of Bligh Sound. Had the accident occurred amidships, she would probably have at once gone down, with all on board. As it was, the ship made water so fast through the leak on the port-bow that she was immediately put back, and anchored in Bounty Haven, at the head of Bligh Sound. The pumps kept the water down, while the divers, with two of whom the 'Clio' was fortunately furnished, examined, and the carpenters stopped the leak. I was very glad to be of some service in this emergency, by pointing out, from my knowledge of their foliage, the best timber trees in the forests covering the slopes of the mountains around this harbour. A party of seamen and marines was sent on shore to provide sufficient wood for such repairs as enabled the 'Clio' to put to sea again in the course of a fortnight. Meanwhile, we were absolutely cut off from all communication with the rest of the world; for the repeated attempts to discover a pass leading directly from the settlements in the Province of Otago to the sounds on its south-western coasts, have hitherto completely failed, owing to the inaccessible character of the intervening forests and mountains. In 1863 Dr Hector, hoping to discover some mode of communication with the inhabited districts on the east of the dividing range, forced his way up the valley of the Cleddaw River, which flows into the head of Milford Sound. After a toilsome scramble of two days, his further progress was barred by almost perpendicular cliffs of some 5000 ft. in height, with snowy peaks rising several thousand feet higher. However, Dr Hector afterwards found his way by a rugged and circuitous path from Martin's Bay (nearly forty miles north of Bligh Sound) to Queenstown, on Loch Wakatipu; and he now volunteered to attempt the same route again, with messages from myself to the Colonial Government, and from Commodore Stirling to the officer commanding H.M.S. 'Virago' at Wellington. Accordingly, on the night of our disaster, he sailed in the launch of the 'Clio,' which returned after an absence of five days, and reported that Dr Hector, with two seamen sent by the Commodore to attend him, had been safely landed on the 19th at Martin's Bay, and had set out forthwith on their journey across the mountains. It may here be mentioned that a river named the Kaduku (or Hollyford), with a difficult bar at its mouth, runs into Martin's Bay from Lake M'Kerrow (or Kakapo), on the northern shore of which a few adventurous settlers from Otago have lately planted themselves.

"On the 27th February we were agreeably surprised by the arrival in Bligh Sound of a small steamer, the 'Storm Bird,' despatched to our assistance by the Colonial

Government, with fifty sheep and other provisions for the officers and crew, so soon as Dr Hector had reached the nearest settlement and made our situation known by telegraph. Shortly afterwards the 'Virago' also arrived to the aid of the 'Clio.' Commodore Stirling then determined to take his ship to be docked at Sydney, so, on the morning of the 1st March, I left Bligh Sound in the 'Storm Bird' for Invercargill. After passing successively the entrances of George, Caswell, Charles, and Nancy Sounds, we anchored at sunset in the secure harbour of Deas Cove, about three miles from the entrance of Thomson Sound. On the following morning we started at daybreak, steamed up Thomson Sound, and returned to the open sea by Doubtful Inlet. After passing the entrance to Daggs Sound, we entered Breaksea Sound and regained the sea by Dusky Bay, in which Captain Cook remained for several weeks in 1773, and which he has described with his usual graphic accuracy. Afterwards we passed the entrances to Chalky and Preservation Inlets, and then proceeded to the Solander, at the west end of Foveaux Straits. It had been reported that some seamen had been cast away there from a recent wreck; but after a careful examination, no trace of any visitors could be found on these desolate rocks, so we bore up for Invercargill, where I landed on the 3rd March. Here began an official tour of great interest through the Middle Island, where I was received by the provincial authorities and by all classes of the community with a warmth of courtesy and hospitality for which I shall ever feel grateful.

"Although Milford Sound, at the extreme north of the thirteen inlets of the West Coast, surpasses the rest in stern grandeur and awful solitude, they all have many features in common. They are everywhere deep and narrow, subject to violent winds and strong tides and currents, and with few safe and sheltered anchorages. A tumbled sea of mountains looks down from above on the long swell of the southern ocean, breaking in clouds of snowy white foam on craggy cliffs rising abruptly from the shore, while glaciers and snowy peaks, slopes covered with noble forest trees, gloomy valleys and glittering waterfalls, all combine to present an ever varying succession of sublime pictures.

"The official tours of a Governor may be made practically useful, for they enable him to point out, from personal knowledge and in an authoritative shape, the resources and capabilities of the districts of the Colony over which he presides, and the advantages which they afford for immigration and for the advancement of capital. I have learned from several quarters that the published reports of my visits to all parts of New Zealand have awakened much interest in the mother country. Time will not permit me, on the present occasion, to discuss the future prospects of a settlement on the sounds of the West Coast, of which I have attempted a general description. It has been proposed to place some Norwegian emigrants on one or more of these fiords, but any scheme of this nature would require careful consideration. There are now no inhabitants whatsoever, either of Europeans or Maoris; the few families of natives seen in Dusky Bay in 1773, by Captain Cook, appear to have become extinct, and the tales related by the old whalers thirty years ago, concerning a tribe of wild men haunting these desolate shores, have probably as little

foundation as the stories of flocks of moas having been seen, within living memory, stalking over the neighbouring mountains, nor can I trespass on your patience any longer with remarks upon the fauna and flora of this part of New Zealand. The supply of timber seems almost inexhaustible. Ducks and other wild fowl are numerous. Whales and seals abound, as well as excellent fish of various kinds. We were tolerably successful in shooting and fishing. I may enliven this part of my address by reading Dr Hector's animated account of one of our seal hunts, in which, however, we were not fortunate. 'On one occasion,' he states, 'the chase of five seals with the steam pinnace of the 'Clio' in the waters of Milford Sound affords a novel and exciting sport. The seals, startled by the snorting of the little high-pressure engine, instead of taking their usual dignified plunge from the rocks into deep water and so vanishing out of sight, went off at full speed diving and reappearing in order to get a glimpse of the strange monster that pursued them so closely. The utmost speed that we could make barely kept us up with them, until they began to show signs of distress, and one by one doubled and dived under the pinnace. Two of the seals held out for a run of three miles, and succeeded at length in getting into safety among the rocks on the opposite shore of the sound. From the experience of the run, the force at which seals can go through the water would seem to be not less than six or seven miles an hour.' On the occasion to which Dr Hector here refers, we, unfortunately, had not our rifles with us, but on subsequent days, as was stated above, I shot several large seals, in addition to a number of wild ducks and other water fowl."

Sir James Fergusson, Baronet, was the next Governor to visit the West Coast. He reached Hokitika overland from Christchurch on Tuesday, 2d December 1873. In addition to the procession on landing, there was a banquet and torchlight procession. Some feeling of disappointment and dissatisfaction was occasioned through a want of forethought or pre-arrangement on His Excellency's reaching town. After meeting the County Chairman (Mr H. L. Robinson) and others, and receiving and replying to an address of welcome from the hands of the Mayor (Mr William Todd) and the Borough Council, the coach conveying the Vice-Regal party did not proceed along the line of route intended. This marred the proceedings to some extent, but the matter was explained at the banquet. The reception otherwise was in every way worthy of the citizens of the newly constituted Province, a proclamation for the alteration of its constitution from that of a County to a Province having just been received from Wellington. Sir James Fergusson's experience of the weather of the coast, which is so much the subject of satire with those who have regularly realised it, was such that his sensitiveness was excited as to his having to appear before the people covered with dust. His successor, the Marquis of Normanby, made his debut under very different circumstances.

On the 21st of February 1877, the Most Honourable the Marquis of Normanby reached Hokitika by sea. In addition to experiencing some of the difficulties of connection with the outer world under which settlement had been promoted on the West Coast, he had also an opportunity of realising the occasional vastness of the resources on

which the prosperity of that settlement distinctly depends—the clouds. He saw in them the mainstay of the country, and in the condition in which they are most appreciated by the miners—in pluvial action, filling dams and water-races, and doing many good things which make the country worthy of being populated and governed. The Marquis was heartily greeted by a large concourse of peaceful, prosperous, and moist subjects of Her Majesty. It was by the Government steamer "Hinemoa" that the fourth Governor came hither. The record of the Governor's experience began with the report from Wellington, "It is blowing hard here," a statement which Westlanders were satirical enough to say was quite unnecessary to communicate. The record of his voyage ended with the intimation from Hokitika, "It is raining hard here"—in the estimation of Wellingtonians an equally unnecessary announcement. With the Governor were the Hon. Mr Bowen, Minister of Justice, Captain Maling, His Excellency's Private Secretary, Mr La Patourel, Aide-de-Camp, Mr G. S. Cooper, Under-Secretary for the Colony, and Mr Thomas Mackay, "guide, philosopher, and friend." The order of the procession looked very well on paper the previous day, but it soon became a foregone conclusion that its formation could not be an accomplished fact, owing to the incessant downpour. The arrangement eventuated into a civic reception of His Excellency under the structure then known as the Transit Shed. Mr Jack, in his capacity of Mayor, in company with the members of the Borough Council, Harbour Board, and Friendly Societies, presented an address of welcome. Notwithstanding the weather, His Excellency utilised the afternoon by visiting the gaol, Lunatic Asylum, and the other public institutions. The chairman and members of the County Council, and the Chairman and members of the Arahura Road Board, were equally active with the civic authorities in preparing for the reception and conveyance of His Excellency to the extra-mural districts, but the execution of their arrangements was necessarily made subject to the dictates of His Excellency and his superior, Jupiter Pluvius. The following day, the weather faired, and the programme of the day's proceedings included four prominent events—an assemblage of school children, a levee, a visit to the volunteer encampment and rifle range at Arahura, and a citizens' banquet in the Town Hall. The town illuminations, on His Excellency's leaving the banquet room, were most creditable to the spirit of the illuminators, and to the skill of the artists in painting and gasfitting. The Governor was driven along the route where these illuminations were visible, and among much explosion of fireworks and loyal sentiment he ended the duties and pleasures of a day which has ever since been remembered with satisfaction by the inhabitants of Hokitika. On Friday, 23d February, His Excellency took his departure northwards, being escorted from the town boundary by the County Chairman, Mr M'Whirter, and the other members of the Council. At Stafford, Goldsborough, and Kumara, the receptions met with were of the most hearty and spontaneous kind. In Kumara, the diggers, to the number of a thousand men, presented a fine sight. Main Street and Seddon Street were spanned with handsome arches and lines on which countless flags were hung. The Vice-Regal party, headed by Messrs Seddon and Houlahan, proceeded down the lead, and inspected the mining operations. Mr

Houlahan's characteristic speech at the banquet in proposing His Excellency's health, and doing honour to a "rale live Markis," will long be remembered by the early residents of Kumara. The Governor reached Greymouth the same evening, where he was most loyally and enthusiastically received. After visiting the coal mines and reviewing the other "lions," he sailed from the Grey in the "Hinemoa" for Westport. During His Excellency's stay in Hokitika he was the guest of the Hon. Mr Bonar, at Government House, and while he was in Greymouth he was the guest of the Mayor, Mr F. Hamilton, at his private house in Mackay Street.

On arriving at Westport, His Excellency was received by 1500 persons, including the Masons, Oddfellows, Foresters, Good Templars, and Rechabites in full regalia, members of the Borough and County Councils, and school children. Addresses were delivered and replied to, and the Governor and his party were escorted by a procession half a mile long to the Empire Hotel. A levee and ball followed. Next morning a visit was paid to Waimangaroa, where an address was presented by the coal mine lessees. In a marquee a collation was laid, and there were several toasts and speeches. A number of ladies were among the visitors. On leaving Westport the Governor took occasion to express his gratification at the cordial and homely welcome given him there and in every town he had visited on the coast.

WESTPORT TO NELSON OVERLAND.

CHAPTER XIII.

TRAVELLING from Westport to Nelson overland now-a-days is a very different thing to what it was fifteen years ago. During that time the tracks and roads, and means of conveyance have undergone marked changes. Facilities for travel are now provided which were then undreamt of. I remember the first trip made by Antonio Zala, the prospector, to the Lyell, when he discovered the famous Alpine quartz reef. Many a weary journey he and his mates had in that direction before a stamp head or a water right was heard of. Zala is undoubtedly entitled to the credit of discovering and opening up the Lyell reefs. His indomitable perseverance, under the most adverse circumstances, is well deserving of special mention amongst the prospecting pioneers of these parts. When the Lyell township was in its early infancy, and when one or two quartz reefs in that direction were making much talk in the neighbourhood of Westport and Greymouth, a special reporter from the *Westport Times* was despatched to report upon the richness or poverty of the land, as his fancy or belief might suggest. He scanned the Lyell, the township, the road, and the claims, minutely, and proceeded onwards to Nelson. Some uneasiness was felt for his safe arrival at the latter place, but after an absence of three weeks or so, the first of his notes, or "all that was left of them," reached the medium through which they were published, and thus his story was narrated.

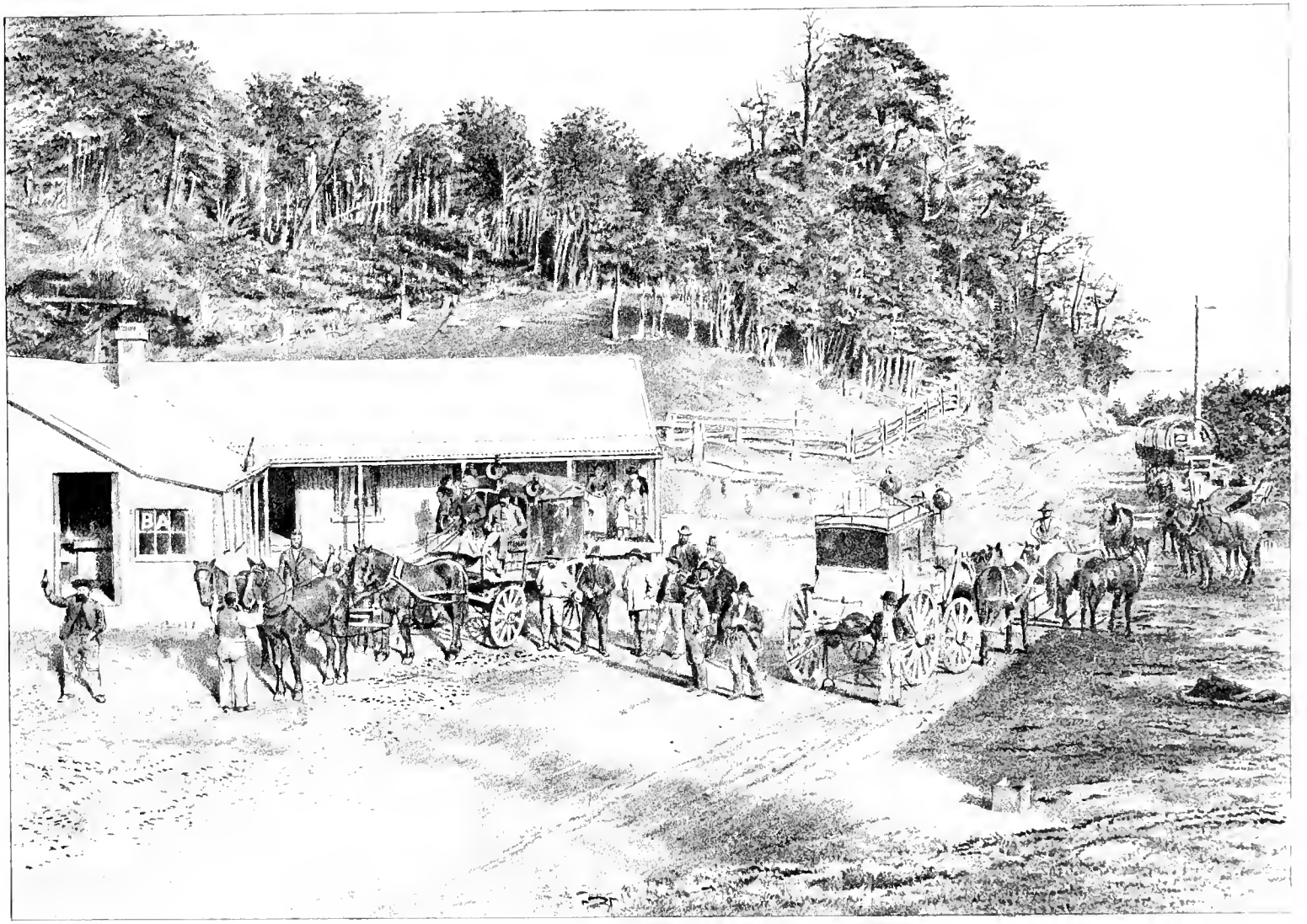
"MR EDITOR,—Permit me to make a few preliminary suggestions. When you again start a special correspondent to the 'remote interior,' please not to start him, or to let him start, before you are perfectly assured that he is perfectly ready. In particular, be particular about his boots. See that they are neither too old nor too new. Read the Scriptures on the subject of wine and bottles—which latter were in ancient days made of leather—and be benefited thereby. A disregard for the easiness of his boots will be culpable on your part; and to him the results may be most melancholy, according to the tenderness of his epidermis, or to the extent to which, in the early agricultural periods of his life, he may have cultivated corns. Beginning with his big toe, he may, by some repulsive order of progression—for particulars of which see Darwin—develop into some hideous form of the genus Blister. To the grief of his friends, his enterprise, like others of more pith and moment, may turn awry, and he, in temper, may turn exceedingly nasty. Were it not that you might mistake it for a play upon words, and might believe that I said it not in all seriousness, I should say that, minus good boots, his mission might prove altogether bootless.

"For a few days before he starts, feed him moderately, but well. Let him eschew colonial beer in quantity, and entice him not to partake of that which, in infinitesimal doses, is infamous in quality. On the morning of his departure, study his appetite as gaolers and gaol chaplains do study the appetites of distinguished but doomed criminals. Let not his breakfast consist solely, as mine did, of soda-water. See that he had not previously supped solely on sixpenny cigars worth nothing, and colonial-made cognac worth a great deal less. Weep with him, if you will, but wine not. Let him 'do his spiriting gently.' As his mission involves questions of muscle and lungs, let him have a short course of reading relative to Harris and Hewitt, and give him a round with the gloves; they are admirable substitutes for the stethoscope. Speak to him like a Polonius and act to him like a father. Put a ten or twenty pound note into his pocket, and present him with a spare pair of socks for his poor feet. Kiss your favourite bar-maid 'for his mother.' Accept his paper collar as a token of his regard and of his temporary abandonment of all the amenities of civilisation. And having departed him—which is an American neologism made at the Lyell—measure not his miles by the map or the distance-table of the almanacs, for there be hills and bogs, and things too numerous to mention, which, as you sit at home at ease, enjoying the cud or the 'kids' of domestic bliss, are not dreamt of in your philosophy. Have great faith as to the contemptible quantity of correspondence which you will receive, and verily you shall not be disappointed. Believe, as I tell you, that he that expecteth nothing will receive lots of it.

"These are a few ridiculous reflections which came into your humble servant's head as the mass of adipose tissue extending therefrom to his sadly fatigued feet lay stretched upon a sofa in Sloan's hotel, Lyell township, after four days of the hardest walking that the said feet had undertaken for a long time before. I hope they satisfy you. They were intended as the beginning of a series of moral reflections, more or less ridiculous, which were certain to suggest themselves during a solitary and weary walk from Westport to Nelson. They were inserted in my note-book, as a sort of sherry-and-bitters for you, before you should have to partake of the heavy diet of practical observations on reefing which I had prepared for you during a two days' visit to the Alpine Reef, up the Lyell; and they were succeeded by many more notes of an equally discursive character which you might have taken as cheese to this diet of practical observations, or as any other condiment which you may be in the habit of patronising. Unfortunately for you, Sir, a misadventure overtook these notes and your most humble and contrite servant. They came to a premature but probably a deserved end. They were sacrificed at the shrine of Necessity. They were made the material of a burnt-offering to the human instinct of Self-Preservation. Gushing descriptions of scenery which almost exhausted the dictionary of its adjectives—records of administrative remissness the possession of which might have made my life unsafe at the hands of the Nelson Executive—a nautical log of soundings taken during the voyage on the Buller road—memoranda of many things most worthless, no doubt—all these, with the paper which contained them, were made matches of, in the unfortunate absence of a sufficient supply of the article from Bell & Black.

To speak less figuratively, Jack Doherty and I and two horses got both bogged and bushed up the Matakitaki River one dark and rainy night. He is a little fellow, but 'game,' and knows a bullock. But he doesn't know, any more than I do, where to find six-to-the-pound candles in the bush, these luxuries not being available, like manna, in the desert; so he and I burnt all the pocketsful of papers we had about us, first to get out of the bog and then to prevent our Rosinantes and ourselves from falling over precipices which do there abound. It was a discovery also that a little bit of burning paper added picturesqueness, if not cheerfulness, to the scene as we sat, smiling at our own grief, in the midst of mud and water, with saddles over our heads as a slight substitute for the shelter shed which the Government had failed to provide at that particular spot. The reporter's best assistant—his note-book—had to be burnt with the rest, and, memory being a treacherous and lazy servant, it is compulsory on me to compromise with you by sending, meantime, some notes relative to the Lyell reef only, for these I preserved. At another time you may get some memoranda of the surroundings of the sources of the Buller, of the circumstances under which they were seen, and of the remarkable places and people which are to be encountered in a journey overland. You may.

"The Lyell is not a river. It is a creek—a little creek. By the miner it would be estimated, during ordinary circumstances, as containing just a few Government heads of water. By your correspondent it was estimated as just being big enough, in one or two places near the township, to afford a comfortable, if somewhat cold bath of a morning. But when the rain falls, as it can fall sometimes in these parts, the peculiarities of the country through which the Lyell runs assist the rain in converting it into a roaring mountain torrent compared with which even the rush of water in the Buller seems subdued. Running in a narrow course by the foot of high hills, and stemmed by the Buller, it often rises 40 ft., and roars in proportion. Its outlet is narrowed by a steep rocky spur, which is most precipitous on the side next the Buller. On the creek side of the spur there is some slightly sloping ground, and upon this slope is built the small township of the Lyell. The township, as seen from the ferryhouse on the opposite bank of the Buller, consists solely of Sloan's hotel, and Sloan's hotel is a little snuggery such as you do not see or enter, either before or after, during the whole journey from Westport, until you reach the order and civilisation of the Nelson side, first represented at the head of the Motueka Valley by Mr M'Farlane, his house, and his probably significant signboard 'Let Glasgow Flourish.' Built of galvanised iron, and situated on the summit of the spur, Sloan's small house is prominent, and, amid the sombre surroundings of dark green bush, rather pretty. But it does not constitute the entire township. When you have been ferried across the Buller by Joe Sullivan—a competent boatman of continental birth and of unpronounceable name, which his wife and friends have thus abbreviated, regardless of the feelings of his mother and his country—you ascend a steep sideling, and enter the township proper. Excuse for a few sentences the language of the showman. You see before you the main street of the town. It is at least thirty paces in length. To the right you behold the store formerly kept by Mr Florian Adank, and now in charge



BEALEY STATION – WEST COAST ROAD

of Mr M'Lean, for Mr Paterson and others at Westport. Beyond it stands the store of Mr Andrew Todd. First on your left is the shop of Mr Louis Pensini—a most excellent man and butcher. Skilled in the use of the knife, and liberal in the exercise of his hospitality, he is an ornament to the place and his profession. His neighbour is a 'snob' —an estimable cordwainer, who amiably accepts his name as the proper English name for the representatives of his trade. In front and upon the street-line, if the township should 'go ahead,' and be surveyed, stands the store of Mr James Ryan, and inside of it, sound in his native proclivities, if not upon his native heath, stands one whose name's Montgomery. Behind it are scattered some houses and tents—the nucleus of the architecture which may yet adorn the terrace which extends thence along the creek side. Turn you to the right, and you ascend another sloping and sometimes sloppy sideling; pass a tenement of a shoemaker whose name is 'Schneider;' then the hut of a news-agent, Charley Cohen; then 'Peter the Greek;' and then you enter Sloan's. And now, having brought you thither, do as I desire you to do—refresh yourself.

"One's first instinct, after refreshment, is to inquire of the landlord how far it is to the reef, and in what direction lies the road thereto. He takes the anxious inquirer to the gable of his house, and points to a series of spurs or mountain sides which form the western watershed of the Lyell Creek. He points to the biggest and most distant of these, and indicates a spot somewhat near the clouds as the probable height to be attained and the distance to be overcome. He subdues one's exaggerated notions as to the distance by stating that it is only two miles and nine chains; but be not deceived thereby. No doubt he may be literally and actually accurate, for he measured the track by tape, but consider always the difference between walking two miles up a ladder and walking the same distance on a horizontal plane. After an intimate acquaintance with the road, I venture to say that any of your readers would, for the same money, prefer to walk six miles of decent road than climb these two. I speak from experience. 'If any one doubts my word,' let him go and do likewise. How men can, for month after month wearied with working all the week, and with hope deferred making the heart sick, carry back burdens of mining materials and provisions over these hills as a species of Sabbath rest, must be incomprehensible to any one who has not read and believed that 'by faith you may remove mountains.'

"I started with little Willy Sloan, the host's son, as the best available Alpine guide. In charge of this noble young person, I went on my way to the reef. For the first half mile or more, the track is on the right-hand side of the Lyell, going up, and it is a fair sideling till you reach a low spur formed by a sharply dipping reef of slaty rock. This is in the vicinity of a place known as the 'Maori bar,' where rich pockets of gold were picked in times gone by. I cross the creek by a log which spans the stream, and the intelligent guide introduces me to what he indicates to be the continuation of the track. It seems to be standing on its end, with a slight tendency to overhang, but it has to be mounted, if the journey is to be made, and ultimately it is accomplished, after a free use of lungs and language. The existing difficulty of this portion of the track could,

however, be easily overcome, by the construction of zig-zag sidelings—provided always that this is the route which the engineers would select. Having ascended the spur we follow a narrow table-land till we reach a sideling on the shady side of the range. The sideling becomes steeper and softer, and we became weary and wet, but we are gratified by occasional glimpses of the wide expanse of Manuka Flat—once a grand old lake—and of the row of ranges which form a magnificent outline on its eastern side. We are scarcely less gratified by hearing the barking of a quadruped, whose voice my friend Young William recognises as that of 'Davie's dog,' and in a few minutes we are made grateful by a hospitable invitation from Davie himself and from his mate, Tom Blair, who pipe a duet from their hut, some distance below, in the welcome words 'Come down and have something to eat.' Tom and Davie are the representatives of the holders of claim No. 2 South, and they had just finished the clearing of the ground, the construction of their hut, and the driving of the first few feet of their tunnel.

"We eat. And on this subject let me say something. Mutton, preceded by potato soup and followed by tea and a few whiffs of twist, is, no doubt, delectable diet. But every rose has its thorn. And the metaphorical thorn in this case is the consideration that all this 'tucker' has to be borne on the backs of men along the track over which we had just succeeded, with difficulty, in dragging our poor bodies, more in the condition of a mass of perspiring pulp than in the proper semblance of the noble human frame. For the two days I was on the ground, I was the recipient of the hospitality of the prospectors, and owe them an apology for the shocking appetite which I exhibited. Like Macbeth, when the words of prayer hung upon his lips, I should have been conscience-stricken, and apostrophising a potato, have ordered it to stick in my throat rather than be swallowed after the sweat of other brows. However, they owe your correspondent an apology also for encouraging him to drink so much tea at unseasonable hours, thereby disturbing his natural rest, and leading him into flights of imagination, the very mildest of which was, that he was Aladdin, and that their tunnel was the golden cave. But, seriously, if visitors to the reefs become numerous, they should also, from the considerations which I have mentioned, become their own providores."

The metaphorical mantle of honour and responsibility which Master Willy Sloan had so manfully worn as the correspondent's guide to the reefs, was next day transferred to the more aged shoulders of Albert, the Swiss, who became his courteous cicerone, and one of his hospitable hosts for the following twenty-four hours. Albert was an old acquaintance, and a year before had been encountered as an enthusiastic exponent of the attributes of the Lyell, in regard to the formation of "specimen gold," and as a prophet of the now proved fact that a rich reef would some day be discovered there. Albert and he went thoroughly over the ground, picking and shoveling surface quartz, and into tunnels, sniffing their strong sulphury atmosphere, and ogling the stone where gold and mundic were visible. The observations then made by the correspondent in detail need not be here published, nor will I ask my readers at this date to follow him through the prospectors' claim, or the claims then known as Nos. 1 and 2 South and North, as the

names and descriptions of each are long since changed. In place of being held by private parties, they are nearly all since formed into large mining companies under the Mines Act, the shareholders in which have witnessed many fluctuations, to their individual loss or profit, as luck directed. Neither will I ask my readers to plod over the ground from the Lyell to Nelson, as was accomplished in those days only by wearied and long-suffering pedestrians. Suffice it to say, our "special," after much endurance, extending over a period, as far as memory serves, of ten days, reached his destination, Nelson, where he subsequently took part in the doings of the Provincial Council as the representative of the Buller constituency.

I have chosen rather to furnish some later particulars of the road between the Lyell and Nelson, in order that travellers taking the journey now-a-days may be acquainted with the stages, distances, and accommodation to be met with on the way. With this object I now append an account, kindly given me by Mr Moynihan, solicitor, of Westport, of a journey recently made by him on horseback, making the starting point that at which I have left off—the Lyell.

Having been put up very comfortably at the Empire Hotel, Lyell, we pursue our journey to Nelson along the left-hand side of the Buller River. The road here is cut out of the side of the hill, and immediately below him the traveller beholds the surging waters of the largest river on the West Coast of this island. Our horses instinctively seem to know the result of a false step or a capsize over the side. No signs of cultivation appear on the surface of the wild and mountainous country along this road to Fern Flat. Nevertheless there is that which will amply repay the traveller for undertaking such a journey, the surrounding scenery being grand and imposing in the extreme. The noble Buller may be seen careering fiercely and madly on its onward course, to be merged in the South Pacific, such force being caused by its narrowness, and the heavy volume of water swollen by many a mountain torrent. But as it becomes wider, so it becomes more tranquil, forming a complete contrast to its previous state. Higher up, the traveller's eye is arrested by the most beautiful waterfalls which imagination can conceive, falls which would delight a Turner or a Gully, and worthy of their strongest efforts. Some of them are 150 ft. high. The upper falls form almost a regular and beautiful staircase, as from step to step the water rushes on, a sight to be remembered. If the traveller hath music in his soul, he cannot fail to be impressed with the singing of the various native birds abounding in the neighbouring bush, happy in their liberty, warbling forth their morning praise to the great Creator. Going from the Lyell to Fern Flat, a distance of eighteen miles, there are very few places of human habitation ; about seven miles from the Lyell there is an accommodation house kept by one Carter. Opposite, on the right-hand side, most of the digging operations are carried on, principally as the water can be more easily obtained, and we suppose the gold is perhaps a little more plentiful. Arrived on the top of a small hill, about seventeen and a half miles from the Lyell, we are relieved by the prospect which now is about to open before us. In a few minutes the houses and green fields—so pleasing to the eye, wearied by the monotony of the bleak mountain view—

indicate that we are once more amongst civilisation and cultivation. We find ourselves in Fern Flat, and it may be curious to note that the very thing which it took its name from, viz., fern, has now altogether disappeared before the hand of the husbandman. Here there are two accommodation houses, one kept by O'Loughlin, recently tenanted by the well-known Alf Smith, the other by S. Oxnam, which has been established ever since the settlement of the locality. There is some excellent agricultural and pastoral land in this district, which supplies the settlers with sufficient sustaining elements. It was somewhat surprising, in this out-of-the-way place, to notice a neat and well laid out race-course. They have their yearly carnival, occupying two days, during Christmas. The wild men (as they are called) from Matakitaki, and all the miners about, roll in to the sport, and frail mortals finish up the jollification poorer but wiser men. Having enjoyed themselves, they go away, and work contentedly for another year. About five miles from the race-course, or eight miles from Fern Flat, the Long-Ford, or the crossing of the Buller River, is reached. Here you leave the Nelson road to the left, and cross the river to go to Glenroy and Matakitaki, so called from the width and shallowness of the river at this point. Just before arriving at the Long-Ford, going from the Lyell to Nelson, there is a narrow bridle track cut leading from the right-hand side of the road towards the river. By following this track for about three-quarters of a mile, a Telegraph Office is reached, situated cosily in the middle of the bush. This office is of much benefit to travellers along the road. To arrive on the Nelson road again one need not return to the bridle track, but in front of the Telegraph Office is a road, which, after following for about a quarter of a mile, brings you on the main line.

Keeping the Buller River to the right, the road being very fair for travelling, the scene is unchanged until you arrive at the Owen River, a tributary of the Buller, ten miles from Long-Ford. This is crossed by means of a well-constructed and substantial bridge. There is a small temperance accommodation house kept by John Oxnam. The country about is somewhat unbroken. Around the homestead, Oxnam has some very good land laid down in English grass and clover.

About nine miles from the Owen, the half-way halting place for stage coaches between the Lyell and Nelson is reached, called the Hope Junction Hotel. This is really the most comfortable resting place on the whole route. The coach leaves here about 5 a.m., so as to arrive at Belgrove in time to catch the mid-day train, which reaches Nelson at 2.30 p.m., on Wednesdays and Saturdays. About two miles from the Hope Junction Hotel, you lose the Buller River to the right, where, about twelve miles back, it takes its rise in Lakes Roti-iti and Rotorua, near Kerr's Station. From the Nelson road to the lakes there is a very good track, and many of the Nelson residents at Christmas time leave the busy life of Sleepy Hollow for a few days' vacation at Kerr's Station, where fishing, pig hunting, and other sports are indulged in.

The country along the road from the latter hotel is of an undulating nature. Small creeks, beautiful and clear, meander along here and there. In the sides are marks of old camping grounds, where the weary and footsore travellers drank and slumbered. Now

and then a stray bullock is seen, but beyond this, and the birds of the bush merrily singing, very little life is discernible. The road now becomes good and level. Six miles from the Hope Junction Hotel, the Hope River is crossed, and, ten miles further on, we reach the base of a high range where the houses of a few cockatoo settlers are situated. The traveller now begins to ascend this range, which winds about in the most tiresome and fantastic manner. The road to the summit is very long, but not steep. On the opposite side the descent is of a corresponding nature, but, owing to the greater and thicker growth of bush, is more sheltered. When the summit is reached a good view of the surrounding wild and romantic country is obtainable. Very little clear ground is visible, and in looking backwards towards the road recently trodden, nothing is seen except bush-clad hills and valleys. On a warm day, the journey down the range is very pleasant, the delicious coolness caused by the dense bush preventing old Sol's scorching rays from falling too hotly on the devoted head of the traveller. Bounteous nature has been also profuse in her beauteous gifts. On the left a beautiful little stream glides calmly and peaceably by, seemingly enjoying itself in its onward course. In its bed you can discern sands of various colours, and on its bank ferns of different species, and plants and leaves of various textures. Three miles further on, that is twelve miles from the foot of the Hope Saddle, brings you to the Motupiko Valley Accommodation House, the proprietor being Mr Fogden, formerly of Nelson. Six miles from this, the Motueka River is reached. There are two accommodation houses here—Hopgood's on the coast side, and Bramall's on the Nelson side, of the river. After leaving Bramall's we continue our journey along a good hard road ; on the left are portions of Spooner Range, covered with fern, and on the right, green pastoral fields. Travelling on a few miles we reach the foot of Spooner Range, the ascent and descent of which are somewhat similar to those of the Hope Saddle, but as regards bush or scenery, there is absolutely none, with the exception of the tall fern and a streamlet here and there. On reaching the summit, the scenery is really magnificent. Below is seen the charming valley of the Waimeas, Wakefield, etc. The Port Hills, which are the only obstruction preventing a sight of Nelson itself. The high mountains of Collingwood, Takaka, and Motueka to the left, Blind Bay in the centre, and away in the distance that intricate but romantic passage, the French Pass, can be clearly seen. At the foot of the Spooner Range the first real settlement is reached, viz., Belgrove, the present terminus of the Nelson railway. Twenty-two miles from this by railway, brings us into Nelson. Passing on our way, Fox Hill, Upper and Lower Wakefield, Spring Grove, Brightwater, Hope, Richmond, the latter place being Nelson's largest inland town, and rapid strides towards its further development are being made by its pushing and enterprising inhabitants each year. After leaving Richmond, the next station is Stoke, one of the prettiest little spots in New Zealand. Four miles further on Nelson is reached. And there ends a long but pleasant journey, which in the early days of the West Coast frequently entailed a month's labour, but which now can be accomplished in a couple or three days, but which, let us hope, will yet, and before many years, be ridden over by the iron horse daily.

THE FRANCIS JOSEPH GLACIER.

CHAPTER XIV.

HEREWITH is given a lithographic sketch of the romantic and very striking scenery at the head of the Waiho River, south of Okarito, Westland. Several years ago these glaciers were visited by the Hon. Wm. Fox, the Premier of the Colony, who was accompanied by Mr Mueller, Chief Surveyor of Westland, and an exceedingly interesting narrative of the visit subsequently appeared in the *West Coast Times*, from which I quote an extract, which describes some of the scenes to be met with at the Francis Joseph Glacier, and the Fox Glacier in that picturesque neighbourhood. The party passed Ross and went along the bed of the Waiho River, to visit the glacier at its head. They reached a camping ground at the foot of Mount Mueller at evening. The account says:—The scenery was charming The widening river-bed and ever-winding, ever-rushing stream, the changing patches of bush and scrub, the lofty hills backed by the towering mountains clothed in their bright snowy garments, and then the glacier, picturesque and beautiful, bathed in the sunshine and clinging to the mountain with icy hand; blood red blossoming rata contrasting with the dull green bush. On the road up, sketches of the glacier were taken by Mr Fox and Mr Brown. The horses, with the aid of a few strokes of a bill-hook, were all placed in natural stalls in the scrub of the river bank, and fed ; fires were lit, dinner cooked, and tents pitched. Breakfast had, and horses fed and watered, the journey afoot up the river was commenced. The highest point attainable by horses is the forks, and a distance of about two miles has to be travelled afoot to reach the glacier. In some places the river seems to have risen about 30 ft., and occasionally to have completely covered the summit of its banks. Approaching nearer, ever changing views of the glacier present themselves ; deeper and deeper becomes the bluish green tinge, deepening still more in the depth of fantastic clefts in the icy mass, the tips of its picturesque points or many steeples, one might say, seem to become shaded in mourning for the passing away of the bright white winter snows. The effect of the view of the glacier from a short distance was considerably heightened by the rata on the adjoining hills being covered with their bright red flowers, contrasting with the dull green bushes and the delicately tinted glacier, and all together bathed in a flood of sunshine. The glacier is about half a mile across, the point rising abruptly like a wall, here and there cut into caves, the lower part having at a short distance much the appearance of a grey rock, from the gravel and stones covering it. From a large cave at the southern end flows forth the first of the Waiho, which runs close across the front of the glacier. Upwards for miles

THE FRANCIS JOSEPH GLACIER.

lies the solid icy mass filling up the huge gully between the lofty hills, and finally hidden from sight by a bend of the mountains. The ice assumes all manner of fantastic shapes. At the base there is a perfect bridge, bright and clear, but not to be trodden by human foot. Higher up is a huge pinnacle with an eye through which the sunlight seemed to stream. These were striking points, but ever new beauties in the view met the wandering eye, and the effect produced on the mind is beyond description. The low altitude of this glacier—about 675 ft. above the sea-level, and the luxuriant vegetation in close proximity to the ice, a vegetation covering the hills on both sides of the glacier for a height of from 800 ft. to 1000 ft.—are the most remarkable features. Further on we get a sketch of a glacier at one of the sources of Cook's River. The party, says the narrative, proceeded up the river, but found the first and second fords rather deep. The river bed at the mouth is considerably less in breadth than that of the Waiho, but higher up it opens into a far more extensive country, some parts covered with high scrub and grass, appearing to afford an excellent run for cattle. After following the river from its mouth for three or four miles the party proceeded in a north-easterly direction for about five miles, when they came within view of a grand glacier falling from the lofty mountains in one solid body, and conveying the idea of a mighty rushing overwhelming river suddenly chained and fixed by frost. When first presented to the view the scene was most grand and singular. By perseverance the glacier was reached, but to obtain a good view of it, crossing the river to the south side was necessary, and that, at first sight, seemed impossible. Soon, however, the discovery was made that close up to the base of the glacier the river ran in several streams. Crossing some of these, and crawling over large boulders, and sometimes over the lower parts of the glacier, the party succeeded in reaching the south side in safety, when Mr Fox took some sketches of the magnificent scenery before him. The *débris*, continually falling down from the glacier, is very considerable, and the whole of the lower part appears from a short distance as if composed of grey stones. On the southern side of the point stands a lofty wooded hill, from which a fine view of the stupendous mass of ice can be had, but there was not sufficient time to examine it from that spot. The appearance of the glacier when closely approached is not so picturesque as the Waiho glacier, but is perhaps more nobly grand in its simplicity. Its height is 770 ft., and therefore nearly 100 ft., higher than the Waiho glacier. The water does not seem to flow out of it as from the Waiho glacier, but bubbles up in its front where there is a remarkable fountain throwing out a great body of water, boiling up some feet in height. The effect of the whole view, like that of the Waiho glacier, is much heightened by the bright red of the rata flowers. As the party proposed to return to Gillespie's Beach the same day, but little time could be spared at the glacier, and having christened it the "Fox Glacier" the return was commenced soon after 2 p.m. Travelling homeward several stoppages were made, and excellent views obtained of the glacier and Mount Cook range in their majestic grandeur.

WESTPORT INDUSTRIES.

CHAPTER XV.

MANY years ago, before the town of Westport could boast of a steamer of its own, or ere a ton of coals had been exported from the Buller coal-field, I let loose my imagination, in idle pastime, to take a fancy flight, and in local newspaper columns, at the time, I drew an imaginary picture of what Westport would be in 1884. Innumerable prophecies were indulged in of the coming greatness of the Buller and its capital. Some of the ancient citizens were supposed to have arrived by express train overland from Nelson. Others came in their carriages from the neighbouring suburbs of Engenarum and Bailietown. The harbour works and docks were laid down in stone, and the harbourmaster was described as having stuck to his department like a leech; while "Lord John" was spoken of as a member or ex-member of the Colonial Legislature. Many of the prognostications then uttered have been realised. Others were so "far fetched" that their realisation was never contemplated. Now, having indulged in a flight of fancy once, and the time of my predictions having come round without fulfilment, let me by way of compensation to the Buller folks adopt the better course here, and enter the well for truth.

In order to accomplish this, I resolved to place myself in communication with a literary friend, a lady whose writings are already widely known in Colonial journals under the *nom de plume* of "L. J. S." I beseeched of her, in her goodness of heart, to furnish me with a chapter, or a portion of one, on the industries of her adopted district—the Buller. "Is it possible," she at first replied, "that anything interesting can be said, thought, or written, on such a dry, solid subject as coal?" The subject differed from her cheerful Christmas stories which have appeared in the *Otago Witness* and the *New Zealand Mail*. It seemed more congenial to jot down a little "Chit Chat from the Capital" or "Notes from the Ladies' Gallery," than to gather coal statistics, or paint an attractive picture in which "black diamonds" must form the foreground. Withal she admitted the importance of the subject, and the necessity for its inclusion in a work having special reference to the West Coast, and her valuable contribution to its pages here follows:—

For many years in the olden time, far back indeed in the "golden era" of this portion of the West Coast, it was ascertained beyond even the shadow of a doubt, that the magnificent ranges of hills overshadowing Westport, were but so many vast treasure houses, filled with unlimited stores of mineral wealth, which only awaited fitting time and opportunity, aided by adequate resources, to develop. And as all things come to those who have but the courage and patience to wait; so at length it has come to pass, that some at least of the good things, for which the people of Westport waited, through

many a long and weary year of doubt and depression, have at last become actual, accomplished facts, and are but the precursors of yet better things to come. Hope is ever the watchword of those who wish to conquer. But the tranquil and decorous Westport of to-day, whose chief export is coal, bears no manner of resemblance to the busy, noisy, turbulent Westport of olden times, when heavy exports of golden ore constantly crossed the Buller Bar. The compact little town of bygone days was literally swept from off the face of the earth by the continued action of fire and flood. But, Phœnix-like, it has risen again into a new and vigorous life, and is, at the time whereof I write, as prosperous and pretty a little town as perhaps any within the Colony. It can boast of no less than four churches, handsome Post and Telegraph Offices, three commodious schoolhouses, Town and Masonic halls, besides many other substantial public and private buildings. The people are intensely patriotic and political, hence the streets are named after celebrated statesmen; the principal thoroughfare, which, by the way, is over a mile in length, being called Palmerston Street, the rest bearing such honoured cognomens as Cobden, Bright, Brougham, Russell, Peel, and so on. As a community the town is at present more united than of yore, although it is but latterly that we have learned to acknowledge the truth underlying the well-worn old adage, namely, that true strength lies in unity of purpose, and not in perpetual petty warfare.

But now I must turn to the really practical part of my subject, the present development and future prospects of the various industries in the Buller district, and I will begin with the coal. Notwithstanding the lack of land available for agricultural and pastoral purposes, Westport possesses natural resources of such a character as to require no specially far-seeing attributes in prophesying a great future for it. The Buller coal-field, situated from ten to eighteen miles from the port, is at once unique in its position, and the great thickness of the seams. Placed at a height of 2000 ft. above the sea-level, the surveyed portion covers an area of 86,000 acres, whilst large areas of coal-bearing country behind the present field have not been surveyed. In the area surveyed, however, are found seams of coal of many thicknesses, varying from 4½ ft. to 53 ft. The coal is of exceptionally high quality, as proved both by chemical analysis and by practical experience from its use on a large scale—containing, as it does, only a very small percentage of ash and water, and being free from all impurities. One seam now being worked is specially adapted for steam purposes, rivalling in this respect the celebrated South Wales steam coals, and is being used almost entirely in the large direct Home steamers on their trips from the Colony to Britain, on the refrigerating vessels, and in the colonial steam service. For with a high quality and freedom from impurities, much less quantity is required to perform the same work than is required of Newcastle (N.S.W.) coals, or other New Zealand coals; consequently, shipowners find that in addition to less coal consumption, more cargo space is rendered available for freight, and therefore better earnings are derived from the steamers working on a long voyage, such as between the Colony and Britain. It will be seen at a glance that an advantage of this kind is a great consideration. Another seam, also now being worked, is specially

suitable for domestic purposes, whilst still other seams now untouched are generally high in quality, and suitable for gas as well as steam and domestic consumption.

A seam of splendid coal exists near the Ngakawau, and will be available for a great export trade as soon as the facilities for getting sufficiently large steamers away from the port are provided. A small export trade to Melbourne is carried on for gas purposes, but this has necessarily been restricted in consequence of an unfavourable condition of the harbour. The following detail of the chemical analysis of the coal now being worked will show conclusively the really superior quality of the coal :—

	No. 1. per cent.	No. 2. per cent.	No. 3. per cent.
Fixed Carbon, ...	64·31	79·28	66·72
Volatile Carbon, ...	33·33	18·0	30·49
Water, ...	·99	·78	1·01
Ash, ...	1·37	1·94	1·78
	100·0	100·0	100·0

Of the whole of the surveyed area of 86,000 acres, only a small portion has been taken up, and this is now held by two proprietaries, the Westport Coal Company, Limited, with a capital of £400,000, and the other, the enterprising steamship proprietor, Captain W. R. Williams, Wellington. The former company has spent about £120,000 in works on the coalfield to bring the coal to the port of shipment, and the works of the latter, constructed by the Koranui Coal Mining Company, have cost between £40,000 and £50,000, so that it will be observed that large expenditure has been made, and great enterprise shown in developing a very small portion of this magnificent coalfield.

In addition to the large expenditure in the construction of works on the coalfield itself, the Westport Coal Company and Captain Williams have each provided a fleet of steamers to take coal away from this port—the former at a cost of about £40,000, and the latter at a cost of about a similar amount. The Westport Company's steamers, the "Kawatiri," "Wareatea," and "Orawiti," are essentially colliers; whilst Captain Williams's steamers, the "Koranui," "Mawhera," "Manawatu," and "Grafton," combine cargo and passenger accommodation. The Union Steamship Company and other shipowners have also provided steam colliers for the trade, and some six or seven new vessels are now on the stocks, or on the way to the Colony for the trade. These steamers have all been provided during the last two years, and it may be said that the development of the coal industry of Westport commenced two years ago, although operations have been going on for some time back. The output is now at the rate of 90,000 to 100,000 tons per annum, but it is expected next year to reach not less than 150,000 tons. The great drawback, however, to the rapid development of a large industry, lies in the unfavourable condition obtaining up to the present in the river entrance. Hitherto vessels drawing more than 12 ft. have been unable to trade regularly to this port, and during the last twelve months, in consequence of a continuation of untoward circumstances, the bar silted up to such a degree that vessels could not leave drawing an average more than 9½ ft. loaded. As a result the industry has been retarded

in its progress, and has been far from remunerative. More recently, however, a series of heavy floods in the river has deepened the bar, so that vessels are now loading to 12 or 13 ft., and the industry is once more brought into a remunerative, if not a flourishing condition. With the harbour deepened, a trade of seven or eight hundred thousand tons a year can easily be done from Westport; and a scheme for this purpose was prepared for the Government some four or five years ago by the eminent harbour engineer, Sir John Coode. This scheme has been under the consideration of the Government for some time, with a view to devising means for its execution, and a bill for the purpose of raising the necessary funds is before the Legislature, and may probably be passed this session. The works proposed by Sir John Coode consist of a series of training walls or moles, similar to those which have given such beneficial results at the sister port of Greymouth, and the estimated cost, including some important internal works and dredging, is £440,000. These works propose to produce 24 ft. of water on the bar at high water, spring tides, and 21 ft. at neap tides. And in the increased revenue which would accrue to Government from the employment of a large mining population at Westport, the proposed expenditure will recoup itself in the course of a few years. That the development of the coal industry will furnish employment for a large population will be apparent, when the fact is considered, that at the present moment, with the comparatively small output yet reached, a population of about 1200 persons are directly dependent on the industry, and a considerable number indirectly. With a very moderate improvement in the harbour, the population would rapidly be increased to 15,000 or 20,000 persons. Having regard, therefore, to the thickness of the coal seams, the facility with which the harbour can be improved, the magnificent character of the harbour when improved, the high quality of the coal, and its proximity to the port of shipment, it seems to me quite clear that the future of Westport is assured; and with the improved harbour, an export trade, rivalling, if not surpassing, that of the great coal port of New South Wales, may reasonably be expected in the course of a very few years. With an abundance of high class fuel produced at a cheap rate, manufacturing industries will doubtless locate themselves at Westport, and what is now a place of comparatively small importance will yet rank foremost amongst New Zealand centres of population.

In reference to the Koranui Company, I may add that it consists of the leases granted to the Wellington Coal Mining Company, and to the original Koranui Company, whose headquarters were at Westport. When it was found that the coal in the Wellington Company's lease—although of excellent quality—was of too soft a nature to bear transit to a remunerative market, and the original Koranui Company wanting funds, the two combined under the name of the Koranui Coal Company. Financial difficulties overtook this company in May 1883, and an unsuccessful attempt to put more capital into the concern by floating a new issue of shares, led to its being wound up. The whole property was sold in one lot on August 6th, by private tender, Captain W. R. Williams being the spirited purchaser. This gentleman will work the mine in conjunction with his fine fleet of steamers, the "Black Diamond Line," to which I have before alluded. And in the

hands of one of New Zealand's most enterprising business men, and hearty supporter of all local industries, the working of the mine will be of undoubted value to the district. The two leases are contiguous, and consist in all of about 1400 acres, which are bounded on the south-west by the rapid flowing torrent of the Waimangaroa River. A large number of men are employed in the mine and on the inclines, but these will be doubled in a very short time. The mine-manager at present is Mr N. Jemieson, and the company have an able general manager in Mr C. Holdsworth.

Having, then, pointed out the immense importance of the coalfields, and shown that this unused wealth is the undoubted germ of much future commerce for the Colony, and of many industries and manufactures, I will now give some account of the vast works which have been undertaken to connect the coal mines with the port of Westport. In the first place, there is the Westport and Ngakawau railway, eight and a half miles long, a colonial work completed about 1878. This railway runs northwards along the coast from Westport, and keeps at the foot of the mountain ranges nearly all the way. Ten miles from Westport a branch line leads off to the right, and follows up the Waimangaroa River for a mile, where the foot of the Koranui Coal Company's incline is reached, and where the screens, coke ovens, and offices of the company are situated. Northwards of the junction of the Waimangaroa side line, the main line is at present little used, all the coal now coming to port being brought down the side line referred to; but this state of matters will not last long, as the great bulk of the Buller coalfield as yet untouched lies from four to eight miles northwards of the Waimangaroa River. The Westport Coal Company's works begin near the foot of the Koranui Company's incline. Starting from this point, and still proceeding up the Waimangaroa River, the side line was constructed for a further distance of about three-quarters of a mile through somewhat expensive country, as the hills close in on the river, and the banks were very steep and liable to slips. About half-way along this portion of the line, the railway had to be constructed on the river bed, and a retaining wall 24 ft. in height was erected between the railway and the river. At this point the first view of the Company's inclines is obtained, and on a bright clear day the observer can see the waggons appearing and disappearing over the brow of the upper incline, although 2000 ft. up and nearly a mile and a half distant. At the terminus of the company's side line of railway, a series of sidings have been constructed for storing full and empty coal waggons, and for making up the trains; and it is on the full sidings here that the coal is handed over to the Government railway department for transit to Westport and for delivery on board vessels in port. These sidings are managed on a system of reverse grades, and the same system has been adopted at the loading sidings at the head of the inclines. The railway waggons are taken to the head of the inclines, where they are loaded at the coal screens. Each waggon weighs when full about eleven tons, and when empty about four. A great advantage, as far as the quality of the coal delivered is concerned, is gained by taking the railway waggons up the inclines to the screens, as in this case, there is only one handling of the coal, from the time it is sent

out of the mines to the time when it is put on board. The sidings are made as nearly as possible to be self-acting. When the full waggon is unhooked from the wire rope of the incline, it runs down (the brake being up) to its position on the full siding. When an empty waggon is required to be hooked on, the brake is lifted, and it runs forward to its position at the foot of the lower incline. Of course the empty ones are placed on the empty siding, and the full ones taken from the full siding by the railway locomotive engine. The inclines are worked entirely by gravitation—that is to say, the full waggon in descending draws the empty one to the top. Two separate wire ropes are used on each incline, which wind and unwind on the drum, 9 ft. in diameter, placed horizontally about 200 ft. back from the brow of each incline. The drums are divided into two compartments, and provided with powerful brake machinery, so that should one rope break, through any accident, the waggon on the other rope can be immediately held stationary. The ropes used are of steel, four inches in circumference, and are capable of bearing a strain of forty tons, but are never subjected to a strain of over eight tons. They are carefully attended to, and kept coated with a mixture of tar and anti-friction grease. Each of these ropes lasts about two years. There are two separate inclines, each with its own brake drum and pair of wire ropes, and the height is nearly equally divided, the waggons being lowered a height of 807 ft. on the upper, and 866 ft. on the lower incline. The lower incline is by far the longest, and the average grade therefore much less steep than on the upper one, the horizontal length of the lower incline being 3300 ft., giving an average grade of about one in four, while the horizontal length of the upper incline is 2000 ft., giving an average grade of about one in two and a half. The grades vary on both inclines, following to a certain extent the natural surface of the country; this was rendered necessary by the rough and uneven nature of the country, as the cost of making two planes on a theoretically perfect section would have been prohibitive. The steepest grade number reached on the inclines is one vertical to one and a half horizontal, and a good portion of the top of the upper incline is constructed on this grade, or about the slope of an ordinary staircase. In both inclines, which are counterparts of each other as far as method of working is concerned, there are three rails on the top, branching out into two separate lines in the middle, where the waggons pass each other, and ending below the turnouts in a single line. Line pulleys or rollers are arranged along the inclines wherever the rope touches the ground, about a foot in length and six inches in diameter, while at the brow, or brake head of each incline, the pulleys are much larger and heavier, as the rope presses more heavily there, and has a slight lateral motion, caused by the winding and unwinding of the drums. Each incline is perfectly straight in itself, although there is a slight difference in their direction. The permanent way consists of rails weighing 40 lbs. to the yard, with sleepers and fastenings exactly similar to those used on the railway, except that the sleepers, where crossing any viaduct work, are fastened down by ten-inch coach screws instead of railway dogs. The formation of these inclines is of the most solid and substantial description throughout, and although constructed on an extremely rough and rugged hillside, composed mainly

of large slips from the range above, in no place has the work hitherto given, in the slightest degree. Very great care was directed to the works while in progress, to obtain or make solid foundations for all structures, and on the designs of these structures for strength and durability. Between the lower and upper inclines there are about 100 ft. of sidings, arranged with reversed grades similar to those described at the terminus of the railway. The full waggons when unhooked from the upper incline run forward to the place where it is hooked on to the rope connected with the lower brake drum, and the empty waggon, on arriving at the brake head of the lower incline, runs back to the foot of the upper incline to be there hooked on. There is something positively "uncanny" in the appearance of these huge waggons moving about apparently of their own accord, especially if you do not see the man on the brake steps. The waggon is lowered on the upper incline in about two minutes, and on the lower incline in about four and a-half minutes; but when the exigencies of the company's trade demand it, the brake machinery will be altered, so as to lower in about three minutes. At present there is a hydraulic brake attached to the drum, which is very safe and excellent in many respects, but which exercises too great a deterrent influence on the waggons, and prevents a sufficient rate of speed in working this incline. Hitherto the upper incline has been worked with a single band brake on the drum, but now a new drum is being got ready with three band brakes in the centre, which is necessary for greater safety, and for preventing the heating of the bands. The brakes are worked in both cases by a small horizontal wheel and a screw, similar to a guard's brake in a railway van. On the upper brake head, which is about 40 ft. below the level of the chain plane from the mines, there is a very complete and comprehensive system of sidings, constructed also with reversed grades similar to those at the middle brake head and the foot of the incline. At this place there is a small stationary engine placed at the tail of the sidings, so that when the empty waggons run back on a reverse grade, after having been released from the incline rope, they are pulled up a short direct grade, until they reach a level sufficient to enable them to run forward under the screens to be loaded, and then to their place before the drum at the upper brake head, where they are hooked on. The empty ones from either side can be switched on to the coal shoot line, or the small coal or "nut" siding. The arrangements for screening and loading the coal are very perfect and complete. The wire hutches or tubs are delivered by the endless chain at the "Top House," a long building roofed in and lighted by a row of windows, and having the floor covered with sheets of iron, so that the tubs can be easily handled. There are two large 6-ft. shoots, with screens, at present in operation, but the increase of the output will soon render it necessary to add others. At the top of each of these shoots, and level with the Top House floor, there are "circular cradles" or "tiplers," into which the loaded wire hutches are rolled by a man stationed at each cradle. The weight of the loaded tub causes these cradles to swing round, so as to turn the tub upside down, and to deliver its load into the shoot. While in the shoot the coal passes over a screen, which is a number of parallel bars placed half an inch apart, through which the nuts and slack drop, while the coal passes on to the bottom of the

shoot, and drops into the railway waggon placed beneath to receive it. The mixed nuts and slack pass over a wire screen below, the nuts remain in the nut bin, and the slack, or fine coal, is deposited on the slack heap. Under the nut bin runs the sidings before referred to, and when a load of nuts is wanted, the empty waggon is run under the bin, a door opened, the waggon filled, the brake lifted, and the waggon runs down to the brake head to be hooked on to the drum. It may here be mentioned that at each of the brake heads strong blocks of wood are fixed, which are kept across the rails until the waggon is hooked on to the incline rope, and removed when the lowering is begun. The screen and shoots are completely roofed in, whereby the operation of screening is much more satisfactorily performed, the coal being always dry; and it is more comfortable for the men employed by the company in screening and loading; a matter of some importance considering that the screens are nearly 2000 ft. above the sea-level, and sometimes exposed to heavy wind and sleet. When the tub has been emptied, it is pulled out of the "cradle," which has fallen back to its original position, and run on to the travelling chain, to be taken by it along the chain plane, and through the main headings of the Banbury mine to Coalbrookdale, or to be taken off at the nearer workings in the Banbury mine. The lowering capacity of the inclines is about 700 tons in eight hours, although it has never been worked up to that quantity in that time as yet, another screen and a band brake at the middle brake head being necessary for that output, as the works are now, and by working two shifts, the company can with ease get out and lower 800 to 900 tons in a day. The chain plane to the adit of the mine is about 1800 ft. in length, and for most of the way has been cut out of the solid rock face of the cliffs. Near the mine great chasms have been bridged over with masonry arches, and the plane supported by retaining walls 20 to 30 ft. in height, while in places the rock cutting on the inside of the plane forms precipices from 50 to 70 ft. in height.

The whole of the Westport Coal Company's engineering works are of the strongest and most durable description, as the company wisely determined that it was better to make all the permanent works good at first so as to avoid the constant expenses of repair and replacing. The whole of the works were designed by and constructed under the superintendence of Messrs Young Brothers, civil engineers, and the successful completion of these large and difficult works, and the quickness and precision with which the traffic is conducted, is due chiefly to their ability and care.

The Westport Company's works are the largest completed engineering works carried out by a private company in the Colony; and there is no similar work of this kind executed. The passenger railway incline between Lyon and Montreux in Switzerland is the nearest parallel case where the height and grade are somewhat similar; but there, there are central rails, and the brakes are worked by the conductor on the carriage. The inclines I have endeavoured to describe are unique as far as weights carried in one waggon, celerity of descent, and rapidity of handling are concerned.

The Koranui works are of a somewhat different character to those of the Westport Coal Company's, inasmuch as the coal is not put into the railway trucks at the top of the inclines but at the bottom; the coal being worked to the foot of the inclines by a series of endless ropes.

In considering the industries of this district, I must not overlook that of timber, which is an important one, and will eventually be far more so when the large areas of wooded country in the upper Buller has been opened up by roads, and the timber so made available. Operations will no doubt then be conducted on a far more extensive scale than at the present time, although even now they are by no means inconsiderable as the following figures will prove. There are several sawmills in the district, and the horse power employed in producing timber is as follows:—Westport 30, steam; Waimangaroa 25, steam; Charleston 10, water. The quantity produced monthly averages about 200,000 ft., value £800. These mills give employment to over sixty men. The export trade is not very large at present, but is gradually increasing. The contracts now existing for railway sleepers for export is 25,000, value about £4000. The timber used principally for these sleepers is black birch, which is found to be durable, and in every way adapted for the purpose; somewhere about 40,000 of these sleepers being used in the 20 miles of railway lines in this locality, comparatively few of which have had to be replaced during the nine or ten years since the line was first constructed. The local requirements for timber being large, the industry does not depend so much upon the export trade for development. Very little totara is found here, but the supply of red and white pine is more abundant. The oldest established firm of timber merchants in the Buller district is that of Messrs Marris Brothers, who have been on the West Coast for about 17 years.

For the first few years after the discovery of gold in the Buller district, the miners sought for the gold only on the beaches and banks of rivers, as in these places it was quickly obtained, and often in large quantities without preliminary labour or outlay. As soon as the best of the gold was taken in any one place and heavy labour became necessary to get more, the miner would quickly shift camp in search of a fresh prize. New discoveries were constantly being made, and hence the rushes of hundreds, or perhaps thousands of miners, which were so common in those days. The beaches and banks of the Buller River proved to be rich, and for a few years after the first discovery, some few thousands of miners were working on the river and its tributaries, the majority of whom made large wages. The method adopted for saving the gold, which was of a coarse flaky description, was very simple, and required but little apparatus, and as a rule but little preliminary labour. But as soon as the easily obtained gold was worked out, and heavy preliminary work became necessary, in fact as soon as the best of the gold had been taken, the miners began to leave, and the population steadily dwindled down. During the last few years there has not been any decrease, but the total number of miners in the Buller district at the present time is only about 500, inclusive of those employed in the quartz mines at the Lyell and elsewhere. Of late years nearly all the claims in the Brighton, Charleston, and Addison districts have been worked on the ground sluicing system. The plan of ground sluicing is simple enough in theory, but often very difficult to put into practice. An open race or tunnel has to be brought up from a lower level to the claim, which generally extends over a few acres that have been proved by shaft mining to contain a lead. This is called a tail-race. The lead may bear a considerable depth

below the surface, and the tail-race must be of the same depth and with sufficient fall to enable the stuff from the claim to travel without blocking it up. Then a water-race has to be brought in to the claim from a higher level. This is termed the head-race; and as the water is the great motive power, it is necessary that there should be a large and very regular supply. If possible, the race is brought in from a river or good-sized stream, but should this not be practicable, reservoirs must be built to catch the rain. For a large claim the race is made of sufficient size to convey 250 inches of water. To construct these head and tail races is often the most arduous undertaking, involving considerable outlay of labour and capital. But where payable gold has been proved to exist, and it is within the range of probability to get at it, the gold miner knows no such word as "fail." He may have to bring up his tail-race for one or even two miles, the greater part of which consists of tunnels with dimensions of 3 ft. by 4 ft., and which, if they are not through solid country, must be timbered. He may have to go for two or three miles to get his water, and then conduct it over rough country, always preserving an even grade; sometimes having to convey it by means of box fluming or iron piping along the face of steep precipices, or across deep ravines. This sort of thing has no doubt to be done on most goldfields, but especially on such a field as Addison's Flat, a visitor could not but be astonished at the immense amount of work done by parties of from four to eight men, and at the ability they have displayed in overcoming every difficulty in their way. Not many miles from Westport a party of six men have worked steadily for more than four years, to open up ground which they have every reason to believe is payable. A tail-race has been brought up for a mile and a half, and water conducted on to the claim by a head-race more than two miles in length. There are at least twenty tunnels in the head and tail races, three of which are each quite 1000 ft. long, through country difficult and dangerous to work, and another is through a hill range nearly 2000 ft. in length. Without the aid of engineer or surveyor, these miners started the tunnel on either side of the range, and met fairly in the middle. Through it they have brought their water from one valley into another, and then on to their claim. This is but one instance out of many on the Buller goldfields of what courage and energy can accomplish.

It is a question of considerable importance whether new fields are likely to be discovered in the Buller district of sufficient value to attract a large population. Much likely country remains as yet unexplored, especially between the head waters of the Mohikinui and the Lyell, and further north in the Karamea riding of the Buller county. Important discoveries may any day be made in these places.

Throughout the Buller district many miners are also engaged to some extent in pastoral pursuits; and smiling homesteads, with good orchards, are a common sight. As a natural result of this more settled life, the miner is in a great measure free from the follies and vices so common on the diggings in former days, but happily in other respects his character is not changed. Now, as then, he is an open-hearted generous man, ever ready to extend a helping hand to any one in need. The genuine gold miner of to-day is essentially an honourable man. He is one of the brightest examples of the self-reliance and exertion that ennoble life. Of the Buller quartz reefs which have of late attracted

considerable attention, it is at present premature to speak with any certainty, but so far as they have been opened up they promise well. About twelve years ago reefs were discovered at Waimangaroa and at the head of the Mohikinui River, and at each place a battery was erected, but in both instances the enterprise failed. At Waimangaroa the stone soon ran out, no further prospecting was done, and the battery was sold. At Mohikinui the quartz yielded about an ounce to the ton, but owing to the rough and inaccessible nature of the country, the cost of taking out the stone and crushing it was greater than the return obtained. After an outlay not far short of £10,000, the enterprise was abandoned; but during the last two years another effort has been made to develop these districts. At Mohikinui fresh reefs have been discovered, and taken up by companies thoroughly determined to spare no expense in giving them a fair trial. A good pack track has been formed from the mouth of the river to the reefs, and the battery has been put in a state of thorough repair, and is now in good working order. The Red Queen on the southern, and the Guiding Star on the northern, bank of the Mohikinui River have been well opened up at a cost of a few thousand pounds, and a considerable quantity of good-looking stone has been taken and is now ready for crushing. This will be commenced in a few weeks, and until the result of the first crushing is known, any estimate of the probable yield would be mere guess work; but much of the stone shows gold so freely, that many experienced quartz miners consider it will prove highly payable, and that Mohikinui will become an important mining centre. In the neighbourhood of Waimangaroa a block of stone, which appears to be exceedingly rich, has also recently been discovered, but it has not yet been sufficiently prospected to prove whether it is part of the solid reef. However, the existence of 1000 tons of stone, which is confidently expected to turn out several ounces to the ton, has been proved; and arrangements have been made for the erection of a battery, which will be commenced forthwith. The machine site is within easy distance of the Westport and Ngakawau Railway, so the cost of erecting the battery will be comparatively small. This claim is the property of the Great Republic Company. It is highly probable that there is much more stone of similar quality in the vicinity of the present workings, and that it only wants a little prospecting to bring it to light. Should this prove to be the case, the Great Republic Company own a claim second to none in the district in value. The total quantity shipped from Westport during the year 1883 was 8300 ounces, value about £33,000, but this did not include the gold from the Lyell Reefs and the Buller River above the Lyell, which finds its way *via* Reefton to Greymouth, or to Nelson, from whence it is shipped to Melbourne or elsewhere. The total quantity exported from Westport is now much smaller than in former years, but is not likely to decrease further; and should the quartz reefs turn out nearly as well as is expected, it will doubtless be largely increased, and the trade of this district will of necessity be greatly benefited thereby.

NOTE.—The writer of the foregoing chapter wishes to acknowledge the courtesy of Mr Hay Dickson, and other gentlemen connected with the coal mines in Westport, who have kindly furnished figures and data, from which much of the information contained herein has been compiled.

A DIGGER ON THE TRAMP.

WESTLAND INDUSTRIES.

CHAPTER XVI.

IN various parts of Westland there are proved to be resources which only require a continuance of the interest now being taken in them, to ensure their development, to create an influx of population, and to firmly establish large industries which should contribute much to the common wealth of the Colony. In the Hokitika and Totara districts, the amount of enterprise which has been displayed in the formation and carrying on of several large mining companies is worthy of all praise, and proves the great confidence which is entertained by both local and foreign capitalists in the resources of these localities.

The timber trade is likewise an important industry, which must, in the course of time, command success on the West Coast.

The alluvial goldfields, extending as they do from north to south in every direction; the recently discovered quartz reefs at Cedar Creek, which only await development; the marble quarries of Caswell Sound; the lithographic quarries of Pawarika; the numerous discoveries of iron, copper, silver, antimony, plumbago, tin, and other minerals, all point to the grand future and ultimate prosperity of the well-named Golden Coast. Of its inhabitants it may justly be said, though they have laboured under many disadvantages as compared with those of other parts of the Colony, they have endeavoured to make the best of that which they possess. They have overcome many difficulties which appeared insurmountable by a sparse population of limited means and appliances. There has certainly been no disposition to imitate the example of a recalcitrant lady of historical fame—Lot's wife.

But while the spirit has been willing on the part of Westlanders, in regard both to the discovery and development of its hidden resources, the wherewithal to carry out their desires has been of an exceedingly limited character. More particularly does this apply to the southern portion of Westland. There can be no question that, from Hokitika southwards to the boundary line between Westland and Otago, there is a vast estate, the value of which is mainly dependent upon the development of its mineral deposits. A large portion of this country is comparatively unknown, and, I am confident, is worthy of being examined, not by what are usually known as Government prospecting parties, but thoroughly and systematically by an organised party of explorers, combining practical and theoretical experience, and superintended by a competent and responsible leader. Free from the obstruction of natives, such as interfered with the opening of goldfields in the North Island; presenting no special difficulties in the matter of

maintaining communication and obtaining supplies; and offering already large inducements to further research, this extensive and interesting territory deserves to be explored, not only with a view to the discovery of gold, but with a view to determining what other minerals may exist, and how much there is to encourage enterprise and settlement. Until something is done in this direction, it is to be feared that the territory referred to will continue to appear on the map as the one piece of country, though the most promising, yet the most thinly populated and insufficiently known. This much may be again repeated before leaving the southern parts of Westland, that there is great need for organising a thorough system of superficial and geological exploration, as no part of the Colony gives greater promise of containing hidden wealth in abundance.

But let us direct our steps northwards, and foremost on the fields stands the Ross United Gold-Mining Company, holding two hundred acres of ground in the Totara district, with a capital of £150,000. This company is managed by a local directory, of which Mr Bonar is chairman; Mr Gibson, manager; and Mr Malfroy, mining manager. A considerable proportion of the capital of this company has been subscribed in London. This company's ground comprises the large area formerly worked and drained at great expense by steam power to the depth of fully 300 ft., at which level very rich gold was obtained. In order to cope with the water, the company have completed a tunnel, two miles in length, which drains the flat to a depth of 100 ft. At this level they have erected powerful hydraulic machinery, which enables them to drain the lower levels at a nominal cost, their main shaft being now sunk 392 ft. Powerful hydraulic elevating machinery has also been constructed to work the surface down to the level of the drainage tunnel, which raises from 2000 to 4000 yds. per diem. The elevating machinery is erected upon ground that has been worked by parties of miners, by means of inclined tramways, for years, with payable results. Under the improved system of working, there can be little doubt that the shareholders in this company will shortly reap a rich reward for their enterprise.

The Prince of Wales Company is the next in point of importance in this district, with a capital of £30,000. It is managed in a similar way, and is situated about half a mile from the southern boundary of the Ross Company, at a place called Donoghues. Here, again, a drainage tunnel has been brought up at a low level, and elevating machinery has proved to be a success, and as soon as the water-works are completed, will be kept in constant operation, and, judging by previous experience of the ground, with very profitable results.

The Mont D'Or Gold-Mining and Water-Race Company, Ross. Capital £12,000, in 12,000 £1 shares. Lease, area fifty acres; average out-turn of gold, 150 ozs. per month; dividend averaging 6s. per share a year. The first lease was taken up by two miners, C. Davey and J. R. Leger, who, having thoroughly prospected the range, and being satisfied the ground would pay if worked on a large scale, applied for certain water-rights, and commenced operations. Owing to the scanty supply of water obtainable, it was found necessary to employ a great deal of labour, and water was purchased from

the Totara and Jones's Creek Water-Race Company to carry the dirt away; at the same time the extension of the head-race was steadily proceeded with. One of the partners, Mr Leger, finding the cost too much, was compelled to divide his interest into three parts, retaining one himself, the other two he disposed of. The party continued struggling along, encountering many obstacles and mishaps, but steadily improving their position, getting into a better way of working, and increasing their water supply, until, in 1882, they resolved to register themselves under the Mining Companies Act. Their property, which four years before had cost them a capital spent in opening out about £1000, was now valued at £9000, and when 3000 of their shares, held in reserve, were offered to the public at 5s. premium, they were eagerly subscribed for, and since then the premium has greatly increased. The success of the company is to a very considerable extent attributable to the indefatigable exertions of Mr Davey, who is now mining manager to the company, and is at the same time one of the largest shareholders. The company is still extending its water system, and it will soon be one of the most valuable in the district. They have initiated the system of laying iron bottoms for their sluice boxes, and negotiations are pending for the acquisition of the necessary appliances to provide an electric light, it having been found that a lot of the night water could not be profitably employed with the poor means of lighting at their command. The whole of the range worked by this company is auriferous, the hill having been cut through in two or three places and the runs of gold traced continuously. This company is controlled by a Board of Directors residing at Ross, though the registered office is at Hokitika, at the office of the manager, Mr L. Northcroft. All the original shareholders continue to hold largely in the company, and retain seats on the directory.

The Mount Greenland Gold-Mining and Water-Race Company, situated on the same range and adjoining the Mont D'Or, was formed originally by a party of twelve miners uniting with twelve business people to bring in a water supply and work a lease by sluicing, as in the Mont D'Or. The construction of the race was a tedious job, it having been done in disjointed sections, and consequently very little work was done on the claim till the race was finished. After they had been in operation a considerable time it was thought desirable to register under the Mining Companies Act, but this was not brought about until after legal action was taken, several of the miners having an insuperable objection to companies. However, the difficulty was got over, and the company registered with 2400 shares at £5 each, making the capital £12,000. Of this amount £10,000, or £4, 3s. 4d. per share, was declared paid up, representing value of the race, plant, etc. This company has done a great deal of remmerative work, and one year it gladdened the hearts of its shareholders by giving 20s. per share in dividends. For the past year or two, however, it has not been paying so well, having been forced to run off a lot of poor top dirt to get into a good way of working. This dead work being now nearly over, the shareholders are anticipating increased yields. The company is managed from Ross, many of the directors being original shareholders.

The Humphreys Gully United Gold-Mining Company, holding two hundred acres in

the Arahura district, is another of the large companies whose shares are partly held in London. The company's ground is situated about ten miles north of Hokitika, and the capital is £150,000. The ground is exceptionally situated for its successful working, having a face of auriferous drift ranging from 200 to 500 ft. high, carrying gold more or less through the whole extent. The get away for the tailings cannot be surpassed, there being a large fall to the Arahura River, and the ground being remarkably free from large stones. The water rights held by this company are fully adequate to their requirements. Good progress is being made with extensive works, necessary for bringing in the large supply of water required, and it is expected in a few months that the company will commence sluicing operations. Mr Bonar is chairman of directors; Mr Gibson, manager; and Mr M'Arthur, engineer.

Several smaller companies in various parts of Westland are worthy of notice, some yielding fair returns, and others showing great promise, but I refer to these five principal claims as likely to work out a new era in the history of gold-mining in Westland, believing that they are the precursors of other undertakings, which will not only yield handsome returns to the owners, but will give employment to a large number of men on these goldfields.

It may here be mentioned that of the gold exported for the twelve months ended 31st March 1884, the West Coast coalfields contributed 49 per cent. as against Otago 35 per cent., and Auckland 16 per cent.; or very nearly one-half, one-third, and one-sixth, respectively. The value of gold exported from the colony has averaged about a million sterling for many years. During the first three years' existence of the West Coast, no less than 829,272 ozs. of gold, of the value of £3,317,118, was exported from the port of Hokitika, on which duty to the amount of £103,659 was paid to the Government. The whole of the gold at that time, and indeed the bulk of it up to the present time, has been the product of individual exertions of small parties of miners, and large areas of ground show signs of now being worked by companies, similar to those above described.

Wandering still northwards, in the Stafford and Goldsborough districts, mining claims are still being worked to advantage, though chiefly by individual labour; while in Kumara and Dillmans some claims are yielding the shareholders handsome returns. These districts have the benefit of the Waimea Water-Race and Holmes's Race, both highly remunerative properties, the former held by the Government, the latter owned by Mr James Holmes of Kumara, who is likely to reap a deserved reward for his persevering enterprise.

Valuable deposits of silver are believed to exist in the Totara district, but, as yet, there have been no returns, though considerable expenditure has been incurred by one public company, and by individual prospectors. Copper ore has been discovered at the Haast, and in various other places in the southern portion of the district, but little has been done towards its development. Several coal seams are known to exist in Westland south, in the Haast, Paringa, Totara, and Kanieri districts. At Paringa a seam, 8 ft. thick and of superior quality, was worked for a short time; and near the Kanieri

Lake a party of enterprising prospectors have expended a few hundred pounds on a seam about the same thickness, but the reports of experts have not been of a sufficiently encouraging nature to warrant large expenditure.

The marble quarries at Caswell Sound have been reported upon most favourably as being of great extent, and the quality of the stone is said to be equal to any in the world, not excepting Carrara marble, as was proved by the fact that the Caswell marble, competing against Italy and other marble producing countries, took first prize at the Sydney and Christchurch Exhibitions. Judges say it is a first class, almost pure sychrine marble, easily and freely worked, and susceptible of a very high polish. The advantages and facilities for working these marbles are such as are possessed by no other marble quarries in the world. Caswell Sound is a commodious, thoroughly safe and land-locked harbour, with great depth of water throughout, and the largest ocean vessels can ride with perfect safety in all weathers, taking in cargo close up to the quarries, the marble cliff outcrop being about 600 ft. perpendicular, with 30 fathoms of water immediately alongside. A company was formed some years ago for the purpose of working these marble quarries, and they have already shipped a considerable quantity of stone, which found ready market at a high price.

Reference has already been made in another chapter to the lithographic stone at Abbey Rocks. About £4000 has been spent in ascertaining the value and extent of the stone at the quarries.

The manufacture of leather, beer, coffee, and furniture have each been successfully carried on, but in the absence of railway communication, insuperable obstacles to the establishment of industries of any kind constantly present themselves. Indeed many of the natural resources of Westland may be said to be lying dormant simply from the want of ready communication with a market. Facility of intercourse is the chief requirement, not only of Westland but of the whole coast, to ensure the development of its resources, to enhance the colonial revenue, and to largely increase the population.

There are nine saw-mills in the county of Westland, two of which are exporting mills, the others supply local demands only. The two principal mills are the Three-Mile Mill and the Maori Mill, each of which can supply 35,000 superficial ft. per week. Good bush may be said to average 32,000 ft. per acre, which, at the shipping price of 50s. per 1000, would make the value per acre, for timber only, £80. This, I am given to understand, is the average yield of timber cut by Messrs Malfroy, Brothers, & Co., the owners of the Three-Mile Creek Mill, for the past nine years. Some years ago there was exported by the proprietors of the Three-Mile Creek Mill, as much as 2,000,000 ft. in one year, but the export from both mills now does not exceed 1,000,000 ft. per annum. The price of timber is cheaper on the coast than anywhere in the Colony, but the high rate of freight ruling, as compared with freights and railway carriage elsewhere, has prevented an extension of this line of business. The exports consist principally of red and white pine, and totara. The Three-Mile Creek Mill is worked by a 45 h.-p. engine; the Maori Mill, the property of Messrs James Craig & Co., by a 40 h.-p. engine. The

other mills are Grimmond's, at Ross, 16 h.-p.; Nicholson's, at Kumara, 12 h.-p.; Maher's, on Ross Road, 14 h.-p.; Lockington's, near Ross, water-power; Pott's, at Rimu, water-power; one at Stafford and another at Kumara, also worked by water. There are thirty or forty varieties of timber in Westland, and the quantity is inexhaustible. Railway communication to the East Coast would revolutionise this industry, as there is an area of good timbered land, within two miles of the railway from Arthur's Pass to Brunnerton, still remaining in the hands of the Crown, of 65,000 acres, which, at the most moderate calculation, would yield to the Government, for the timber upon it, at least £5 per acre. There is a further area of 100,000 acres outside of this line, of two miles on each side, which is believed would readily bring £3 per acre; and beyond this, there is an area of 2,600,000 acres of Crown lands, still unsold, the value of which is difficult at present to estimate.

GREYMOUTH INDUSTRIES.

CHAPTER XVII.

THE town of Greymouth, like that of Hokitika, was the scene of a large and bustling rush of miners in the summer of 1865. The bulk of the diggers who happened to locate in that direction found themselves at once in luck's way. New rushes throughout the district were then frequent and numerous. Many a lucky one's yarns of the earliest days of the Grey would rival those of the young Victorians, when naught was heard of but "gold, gold, bright and yellow, hard and cold." First a digging township, with its primitive buildings, diminutive stores, canvas signs, and shingly river banks; now a flourishing and permanent centre town of a large and promising district, an established shipping depot with great natural facilities, in the possession of an industrious and zealous community, who had good reason to be confident in their own resources. Besides their large annual out-turn of gold, the enterprise of the citizens of Greymouth has been the means of discovering, and is now the means of developing, a most valuable estate in the shape of an extensive, workable, and permanent coalfield.

The Brunner Mine,

which takes its name from Mr Brunner, the explorer and discoverer, to whom reference has already been made in a previous chapter, is situated about eight miles up the Grey River. Samples of the coal were tested as early as 1862, and work was first commenced in 1864. Matthew Batty and party were the first to lease the mine from the Nelson Provincial Government. They were unable, however, to comply, profitably to themselves, with the terms of the lease, which was ultimately cancelled. A second company from Ballarat got possession of the mine, and obtained a lease subject to certain royalties, and reserved rental, and a stipulated output of coal annually. Little or no attempt was made by this company to comply with the conditions of the lease. All they did was to provide a couple of coal barges, which they employed in bringing coal from the mine to the port, where it was sold to any ship in the harbour, at prices varying from 18s. to 25s. per ton. Finally the Nelson Government cancelled the lease, after being about four years in possession of the Ballarat Company. The Provincial Government then worked the mine on its own account, getting the Warden to supervise the payment of the men employed and to receive the proceeds from the sale of coal. Mr J. Dent was at this time the mine manager. In this way the mine was worked up to 1874, when a lease for 21 years was granted by the Superintendent of Nelson to a Melbourne firm, Messrs Croker, Hughes,

and M'Carthy, on the usual conditions of rent and royalty, and a yearly output, commencing at 12,000 tons, and increasing 3000 tons every year, until a maximum of 30,000 tons would be reached. The new lessees were very loud in their professions of the hundreds of thousands of pounds they were to embark in the development of the mine and in providing steam colliers, but it soon became apparent that they only embarked in the venture as a speculation. Not answering their anticipations, they quarrelled amongst themselves, and after a lapse of six months, in July 1874, they sold out all their interest in the lease of 1280 acres to the present owners, Messrs Kennedy Brothers of Greymouth. This enterprising firm have, since that time to the present date, worked the mine most successfully.

Up to July 1874, the output of coal from the mine for the preceding twelve months was about 10,000 tons, and the area worked was about 15 acres. The seam, although brittle, was regarded as the best in the Australian Colonies, being 16 ft. thick, clean and free from bands, and was pronounced an excellent gas, smithy, and steam coal. There was, however, one drawback. A large fault was met while the mine was being worked by the Provincial Government. It had been examined and was reported upon by Dr Hector and other authorities in coal mining, and geologists, who concluded that it was a downthrow of at least 100 ft. The manager, Mr Dent, was authorised to prove this fault, and for that purpose put down a winze, but after sinking some 60 ft., abandoned the project, not being satisfied with appearances. But when the new proprietors got hold of the property, coal mining was commenced on proper principles, and the work was carried on in real earnest. Like all new industries, coal mining had then, and I suppose still has, its difficulties. More especially were these visible in the early days of Messrs Kennedy Brothers' occupancy of the mine, when ships had to be employed to take the coal to markets of consumption which were already occupied by the trade, who held large bottoms of 1000 tons and upwards, which were regularly engaged between Newcastle and New Zealand ports, whereas only vessels of about 100 tons could be employed at Greymouth, owing to the shallowness of the bar in those days. The firm in this way had a handicap of 10s. per ton, the freights being 15s. per ton from Newcastle, as against 25s. per ton from Greymouth. To overcome this difficulty Messrs Kennedy were compelled to purchase sailing vessels, coal hulks, and steamships. Subsequently they established branches at the principal ports in the Colony, with the object of pushing the sale of their coal. In 1875 the General Government, in order to facilitate the progress of this industry, constructed a line of railway from Greymouth to Brunnerton. Sir John Coode proposed plans for the improvement of the harbour, and after a considerable expenditure annually by the Government, the depth of water on the bar at high tide is now seldom less than 14 ft., and often 16 to 18 ft.

Messrs Kennedy Brothers have now, of their own fleet, five sailing vessels, barques, and schooners, and two steamers, the "St Kilda" and the "Maori." They also are constantly freighting innumerable steamers and ships throughout the Colony and Victoria, which they load up with the produce of this mine. In addition to coal-mining,

they have added coke-making, fire brick and common brick manufacturing, also lime-burning from Hawke's Bay stone, conveyed in their vessels as ballast.

A short description of the work will be interesting, and this I am enabled to give from data furnished me by Messrs Kennedy Brothers. Immediately on crossing the Suspension Bridge at the Grey Gorge, we are on the Brunner Lease. Mr J. Bishop is the resident manager and engineer at the mine, under whose direction and management the entire works have been placed and have been carried on during the past two years. In viewing the machinery on the surface, there is first seen a 20 h.-p. engine, constructed by Messrs Kincaid, M'Queen, & Co., of Dunedin, which is used for hauling coal from the dip workings, by means of a $2\frac{1}{2}$-in. steel wire rope over a large drum. Six skips, of 15 cwt. each, are hauled up each time, and the drum is reversed when lowering the empties. The road is on an incline of 1 in 6, and is about 20 chains in length. Close to the engine-house is another engine of 7 h.-p., which works an elevator for lifting the slack or small coal to a height of about 50 ft., where it passes over a screen, the largest of which is technically called "nuts," and passes into a large bin, capable of holding 200 tons, which is completely covered in. At this elevation the railway hoppers are placed under it, and the doors and traps, of which there are several, are drawn back by means of a lever, and a truck of six tons is filled in a minute. The fine slack separated from the nuts passes down the bin through a trunkway, and is taken away for coke-making. Steam is supplied to these engines by means of two large tubular boilers, by Clayton and Shuttleworth, set beside each other and close to the main engine. These boilers also supply steam to a 16 h.-p. engine, used for crushing the fire-clay at the fire-brick works, which will be referred to later on, and also to three Pulsometer pumps and one Tangye, which are at various levels in the dip workings, and by which means this, the only part of the mine which is not free level, is kept pumped. Mr Bishop says, for shallow workings these Pulsometers give more satisfaction than any pumps he knows of, the Tangye being used for the furthest part of the dip workings.

It is rather curious to stand on the platform or tipping bank, and watch the amount of coal arriving from various quarters with the greatest regularity, and no confusion of any kind whatever. For, in addition to the dip workings, there is also what is called the rise workings, and which are worked "level free." The coal from this part of the mine used to be lowered by means of drums and wire ropes placed inside of the mine and at the top of the bank. As the works got far back several of these drums had to be erected, thus increasing the cost very largely. This Mr Bishop has superseded by applying an endless rope extending the whole way to the farthest part of the rise workings, so that it only requires one man at the top of the bank to hang on any quantity of coal up to 500 tons in 8 hours. The banksmen who attend tipping the coal over the screens on the surface take the coal off as it arrives. This endless rope travels very slowly, the motion being hardly perceptible. The trucks standing about 40 yds. apart on the rope give ample time for removal and hanging on the empties. Mr Bishop is satisfied this is the cheapest system that could be applied to that part of the mine workings, as the

incline is in favour of the load, being about 1 in 6, and therefore requires no engine-power to work. The total length of this line is 1078 yards, and has a double line of 20 lb. steel rails, with which all travelling roads in the mine are laid. The rails used for boards are 14 lb., being light and handy for frequent shifting. This endless rope passes over an elevated wheel placed on the tipping bank. It travels at right angles to the rope working from the dip. The total daily output is about 400 tons, and is all passed over a fixed screen of $\frac{3}{4}$-in. mesh. The small passing through this mesh is called slack, and, as already described, is again elevated and made into nuts. The fine dust is converted into coke or washed into the adjacent river Grey, as the market for coke is not equal to one-half of the available fine coal.

The interior of the mine you enter by means of a tunnel from the level of the tipping bank, and ascending this road over which the endless rope is working, you pass through the old workings, about 35 to 40 acres in extent, now comparatively worked out. Probably at some future time a large quantity of steam coal and coking coal will be drawn therefrom. One cannot help being struck with the brilliant appearance of glow worms, which are to be seen on the pillars of coal throughout the mine. The effect is grand, and almost affords sufficient light to enable you to pass along without the aid of your naked candle. There is also another striking feature in these old workings, to see what was once the pavement and 16 ft. apart from the sandstone roof, has now actually in many places come together, not by any failure or depression in the roof, but by the floor or pavement rising up. This is technically called "creep," and is caused by the pillars being taken out or so reduced that the underneath strata being relieved of the great pressure of coal removed, expands and creeps, until it meets the roof. This was a source of frightful cost and interruption a few years past to the proprietors, having had to keep cutting away the bottom, on various occasions several feet at a time, in order to maintain a road open to the upper or new portion of the workings. It is said that in the old collieries at Home, a whole mile of such a road has been known to close up completely in one night by the floor lifting up. During these years the area of coal workings was contracted, owing to the presence of the fault already noted cutting off the coal to the westward, and baffled all attempts on the part of Mr R. Elliott, the then mine manager, to find it.

In 1877, Dr Hector, at an interview Mr Kennedy had with him at his office in Wellington, described the nature of this fault, and expected it was a down-throw of 100 ft. At this time, Mr Elliott believing it was a whinstone dyke, put a level tunnel into the rock at right angles to the fault slip, a distance of 200 ft., costing £1000, without any result. This was abandoned and a double tunnel started on the line of the slip, as advised by Dr Hector. When this was driven about 800 ft., the gas was giving off very freely, and the air became too bad for working without mechanical appliances for ventilation. A 16 ft. gurbal fan was procured and erected in the interior of the mine to be driven by a turbine. The water being partly obtained from the drainage of the mine, was brought in from the surface. It was never worked for any length of time, only being

started a few times as a trial. The manager, Mr Elliott, and the builder, the late Mr Broadfoot, being present at one of these trials, Mr Broadfoot lifted his candle towards the roof, thus causing an explosion, by which Broadfoot lost his life. The manager narrowly escaped, and the fan was blown to atoms, thus stopping the further prosecution of this mode of seeking for the lost coal.

This accident led to a change of mine managers, and Mr Jonathan Harrison, F.G.S., entered on the management, which he kept for one year, and resigned to accept the management of the Wallsend Mine. During Mr Harrison's management, he succeeded in carrying the coal workings beyond the line of fault to the westward, and it was thought then, and may yet prove correct, that he thus proved this great barrier of a fault. At all events it is quite certain that by his action a large coal area was made available, which under a less observant person might have remained dormant, and be to this day regarded as the continuation of the fault. It is from this field one-half of the present outpnt is being obtained, and is commanded by the endless rope, and that portion of the mine looks inexhaustible although the seam is thin, 9 ft., in comparison with the seam lower down the mine, 16 ft. thick. After Mr Harrison, the mine was managed by Mr James Lees, and for a short period by Mr Tattly. During Mr Lees' term the dip workings were started to provide and ensure together with the rise workings a certain supply for all possible demands, pending the proving of the fault in what was regarded the proper position in the tunnel where the explosion occurred.

Mr Bishop superseded Mr Tattly in the management, and this may be regarded as the turning point in this important property. The inferior pumping appliances in the dip workings were replaced with the present complete pumps. The winding engine was replaced with a new and suitable one now at work. The working roads were all put in order and have since been kept in order, thus doing away with the enormous amount of breakage previously occurring. Hadfield's steel wheels and axles have been imported and applied to the running skips in the mine, thus saving largely in cost of grease, oil and labour for lubricating and avoiding frequent break-down of the iron wheels. The ventilating fan has been rebuilt, but not in the position where formerly wrecked. It is now on the outside of the mine at the highest-up entrance about 100 ft. higher up than the tipping bank. This is also driven by a small portable engine 8 h.-p., and keeps the mine thoroughly ventilated; so much of the workings are commanded by openings to the surface that they are easily ventilated. With the completion of this fan Mr Bishop made a new start for the great work of proving the fault, and after satisfying himself that the old tunnels were in the proper direction for the work, he had them cleaned out and put in order, a work of greater magnitude almost than making a new start as it subsequently proved. And after prosecuting this tunnel a further 150 ft., not exactly in the same line, but turning off more to the westward and entering the original undisturbed strata, he was rewarded by discovering the long lost seam. Judging by its appearance and thickness, fully 16 to 18 ft., it is the full seam. Thus, after the lapse of about 15 years' work, which was carried on at long or short intervals, but of late

years more regularly, and at an enormous cost, the coal seam has been proved, after having driven a level tunnel of 950 ft. long in the fault and a small air drive above, but connected at intervals. The dip is about 230 ft. The main tunnel will now serve as a working road, first for horse traction, until the works are somewhat extended, when a double drum and tail rope (wire rope system) will be applied to it. By that time the dip workings will be discontinued, and the engine power and drums set free to work this district, which Mr Bishop says will yield 100 tons per hour quite easily.

There has for several years been a feeling of uneasiness as to the permanent workings of this Brunner Mine, owing to this fault having cut off so large a portion of the coal area. Now that it is proved satisfactorily and beyond all doubt, there is corresponding satisfaction in the minds of every one who has an interest in the district, and indeed in the Colony, for the prosperity of the mining district and town of Grey, together with the Brunner railway, is largely dependent on the success and extent of these workings. The proprietors and manager may be complimented and congratulated on the skill, energy, and perseverance displayed in its prosecution to so successful a termination.

The port of Greymouth has, of late, so much improved, that steamers drawing 13 ft. have crossed the bar and have taken away as much as 600 tons of coal, consequently the mine has made rapid strides. The output of coal from the mine during 1883 was 68,000 tons, or an increase of some 24,000 tons on the preceding year. This is stated by the Mines Inspector, in his official reports, to be equal to half the total increase of the whole Middle Island of New Zealand. The Government official reports also show the total output of coal from the New Zealand mines to be 421,764 tons, and as there are about 100 mines at work, the Brunner may be said to hold a leading position, having supplied about one-sixth of the total coal produced in the Colony. At the present time the mine is capable of turning out above 400 tons daily. Over the larger portion of the lease of 1280 acres coal is known to exist, and as the seam may be taken, on the average, at 12 ft. thick, the coal may be said to be practically inexhaustible. Up to the present time only a very few acres of the seam have been worked out.

In order to keep pace with the development of the trade and provide for future requirements, the proprietors have, during the past two years, not only carried out various improvements by erecting new and improved machinery for haulage of the coal from the mine and for other purposes, but they are at present engaged on extensive improvements for the better screening and classifying of the coal. These, when completed, will enable a much larger quantity of coal to be dealt with, and will provide for its being sent away in better condition. The coal produced from the mine is of a rich bituminous nature, and has been proved, by analysis and extensive use, to be the best gas coal in the whole of the Australian Colonies, and is equal to the best English coal for this purpose. Owing to its high evaporative power and freedom from impurities, it is found invaluable as a fuel for ocean going steamers. The fastest run on record between New Zealand and England has been made with this coal. It is also extensively used and highly appreciated for smithy and other kindred purposes; and is coming into favour as a household coal, its caking

qualities being for a time against it, but when understood are advantageous, as has been found in England.

In connection with the mine, there are 12 coke ovens capable of producing 60 tons of coke per week, which is in excess of the demand at present. In quality the Brunner coke is hard and dense, having the silvery appearance which is so much looked after by coke users, and in consequence is highly appreciated for foundry purposes. It is also used for the locomotives on some of the heavy grade lines of the Colony. For city lines like Lyttelton and Christchurch the wonder is, why coke is not used instead of coal, and so get rid of the smoke and sulphur so obnoxious to passengers, especially in long tunnels.

The works for the manufacture of bricks, gas retorts, and other fire-clay goods, have been established for some years, but during the last 12 months, the old works have been superseded by the erection of a complete new plant with improved machinery and drying sheds. These works are now capable of producing fire-bricks of all shapes and sizes, gas retorts, pipes and sanitary pipes, or other special goods to supply the whole colonial demand. At present nearly all the large gas works in New Zealand are users of retorts made at the Brunner works, and users of fire-clay goods may have confidence in obtaining goods at these works equal, if not superior, to imported articles. Large quantities of bricks, tiles, and other goods, also ground fire-clay, are always on hand and ready for immediate shipment.

The markets for the produce of this mine may at present be said to be New Zealand and Victoria. In New Zealand the coal is used for the production of gas, steam, and for smithy and other purposes. In the Colony of Victoria it is used for gas whenever it can be obtained, and is much preferred to New South Wales coal. The obtaining of new outlets for the produce of this mine will largely depend on the further contemplated improvement to the Greymouth harbour, for, with depth of water to enable larger vessels to enter the port, there can be no reasonable limit put to the distance to which the productions of these works may be sent. As it is, the works now in course of being carried out at the mine will enable the large demand to be met wherever the facilities are provided for carrying it away.

At present there is a difficulty in competing with Newcastle coal in New Zealand markets, as most of the Newcastle coal is imported in large bottoms of 1000 to 3000 tons, carrying round charters from Home. These vessels come from Australia to load grain, taking in coal at Newcastle at nominal freights. There are also four or five large steamers, each 2000 tons, coal carrying, regularly employed between Newcastle and New Zealand. Their coal freights are also nominal, relying on passengers and return cargo to pay them. The outcome of this is seen by the fact, that in 1878 the colonial railways at Lyttelton and Wellington paid 35s. per ton for Newcastle coal for their requirements. Last year the price was 24s. for West Coast coal, which is 10 per cent. superior. Thus the Colony effects a yearly saving on the 80,000 tons of coal used for railway purposes, 10s. per ton, or £40,000, by the West Coast coal, apart from other considerations.

The proprietors are in a position to execute orders to the extent of 2500 tons of coal weekly, 60 tons of coke, 150 to 200 tons of fire-clay, tiles, etc., and 50 tons of lime, within the same time. They have obtained the highest awards for the above products at the Sydney, Melbourne, and New Zealand International Exhibitions. The coke is admittedly the best manufactured in England or Australia. The fire-clay gas retorts from this mine have been used in the Dunedin, Nelson, Wanganui, Hokitika, Greymouth, and Bendigo gas works, and have given the utmost satisfaction.

The ships owned by Messrs Kennedy Brothers are the s.s. "St Kilda," s.s. "Maori," p.s. tug "Dispatch," barque "Pelham," barquentine "St Kilda," brigantine "Eliza Firth," brigantine "Anthons," and schooner "Cora." The firm have branches at Dunedin, Lyttelton, Christchurch, Wellington, Wanganui, Waitara, and Melbourne, with the head office at Greymouth. In addition to the fleet above named, they have hulks of large storing capacity at Wellington, Lyttelton, and Dunedin. They are therefore enabled, not only to mine, but to carry and sell their own coal throughout the Colony and in Australia. Besides, as I have stated, their own tonnage only does a fraction of their carrying. They are owners of the local tug-boat, and for vessels arriving in ballast the low charge of 2s. per ton register is made, which includes the towage inwards and outwards.

With the contemplated improvement to the harbour and means of shipping coal, under the new Harbour Trust, steam colliers of large tonnage will, no doubt, be shortly employed in the trade. It is confidently believed, that within a few months' time, the proprietors of the Brunner Mine will be able to put 1000 tons per day on the market when the demand for that quantity arises.

I cannot close this portion of the chapter without saying, that the rich reward which is now in a fair way of being reaped by the proprietors of this mine is fully deserved, as it is the outcome of individual courage, energy, and perseverance, and a just recompense for industry and integrity. Mr James Bishop, the present mine manager and engineer, is also entitled to a meed of praise, as it is greatly owing to his capability and efficiency that the mine and works, generally, have, within the last two years, made such rapid progress.

Other Companies.

The Coal Pit Heath Company's lease of 770 acres adjoins that of the Brunner Mine on the west side, the boundary being about 150 yards lower down the river than the entrance to the Brunner Mine. There is little or no difference in the quality of the coal. The entrance is by a shaft 300 ft. deep, which is worked by a 35 h.-p. engine. The seam averages nearly 16 ft. in thickness. The yielding capacity is, like that of the Brunner Mine, practically unlimited. This mine is capable of an output of 150 to 200 tons per day of eight hours. Were demand sufficient an output of 600 tons in 24 hours could be obtained. This company's coke has likewise been favourably reported on by various iron founders in this Colony and in Victoria. The directors of this company contemplate

forming a new company with a capital of £100,000 in 20,000 shares of £5 each, of which 12,500 shares are to be offered to the public. The scheme proposes the purchase of steam colliers specially adapted to the trade and generally extending their operations. The position of this mine for advantageous working is unique, and many of the remarks made in reference to the Brunner Mine apply equally to the Coal Pit Heath Mine.

The Coal Creek Company's ground adjoins that of the Coal Pit Heath Company on the north-west side. The quality of the Coal Creek coal is similar to that of the other companies above referred to.

I should like to have been able to have quoted in full an excellent geographical report on the coal and goldfields in the Grey Valley, contributed to the *Colliery Guardian* by Mr Jonathan Harrison, F.G.S., which gives valuable information, not only in respect to the coal measures here alluded to, but likewise in reference to the great reefing country of Inangahua.

The Dispatch Foundry Co., Limited, Greymouth, acquired the business of engineers, iron and brass moulders, millwrights, wood turners, boiler moulders, and general smiths, that was carried on by Messrs Rae & Sewell in 1874. Those gentlemen invested £2400, but found this sum quite inadequate to carry on the business. Seeing that a local foundry was a boon to the district, the public at once responded, and contributed the sum of £7000, so that the premises and tools might be complete to take in any job that might offer itself. From the very great competition in New Zealand towns and Melbourne, the shareholders were aware that small dividends would be their share. Still, rather than suffer the inconvenience and loss of time incident on sending work away, they were satisfied to support the undertaking, knowing well that indirectly they were furthering the interests of themselves and the public at large. In the payment of dividends they have not been mistaken. The company has barely paid the shareholders 4 per cent. per annum on their capital, although the most rigid economy and best management has been practised. The company employ and have employed eighteen hands on an average, paying them weekly about £50; moulders and blacksmiths are paid £4 per week; fitters and turners, 12s. per day; labourers, 9s. per day; and boys, 7s. to 30s. per week. It is necessary in this, as in all jobbing shops, to have a man who can take the head of each department above mentioned. The staff must be kept up so that any job that offers in those departments can be taken in hand and finished. Very often it happens that there are no jobs in for a particular class of hands; these then assist the others and try to surmount the difficulties attending on all such workshops as the Greymouth Foundry. The work turned out by the company is and has been of the most varied description. The heaviest casting they have been called on to turn out was a little over three tons, but they have appliances for turning out much heavier work than this. The heaviest gun metal casting was 600 pounds. The same can be said of this branch. The company have in the best working order 17 machines or tools of the latest construction connected with their main shafting, fitted with fast and loose pulleys, and are adding two more, namely a set of boiler rolls to take in a nine feet plate, and a

circular saw for cutting up iron cold. A West Coast foundry has the advantage of cheap coals and coke. The very best coals adapted for their purposes are supplied at 8s. per ton and ditto coke 20s. This, in a measure, gives it an advantage over a foundry that is some distance from a coal supply. The business is kept going by orders from Ross and Hokitika in the south, Westport in the north, the reefs and mining claims inland, and the three local coal mines. Shipping business is almost *nil*, as vessels trading to larger ports keep their work for these ports; they imagine they get the work done cheaper. Agricultural business is also *nil*, and will remain so till farming business is opened up. It is contemplated to establish a Harbour Board, which will again push on the harbour works. They have been at a standstill for a considerable time, thus entailing a serious falling off in the foundry business, as the jobs from these works and the quarry, while in working order, amounted to a considerable sum.

Saw-mills are established throughout the Grey Valley district in like manner to the Westland district, though the quantity of timber exported has been small in comparison, the mills being employed in supplying local requirements only.

THE REEFTON MINES.

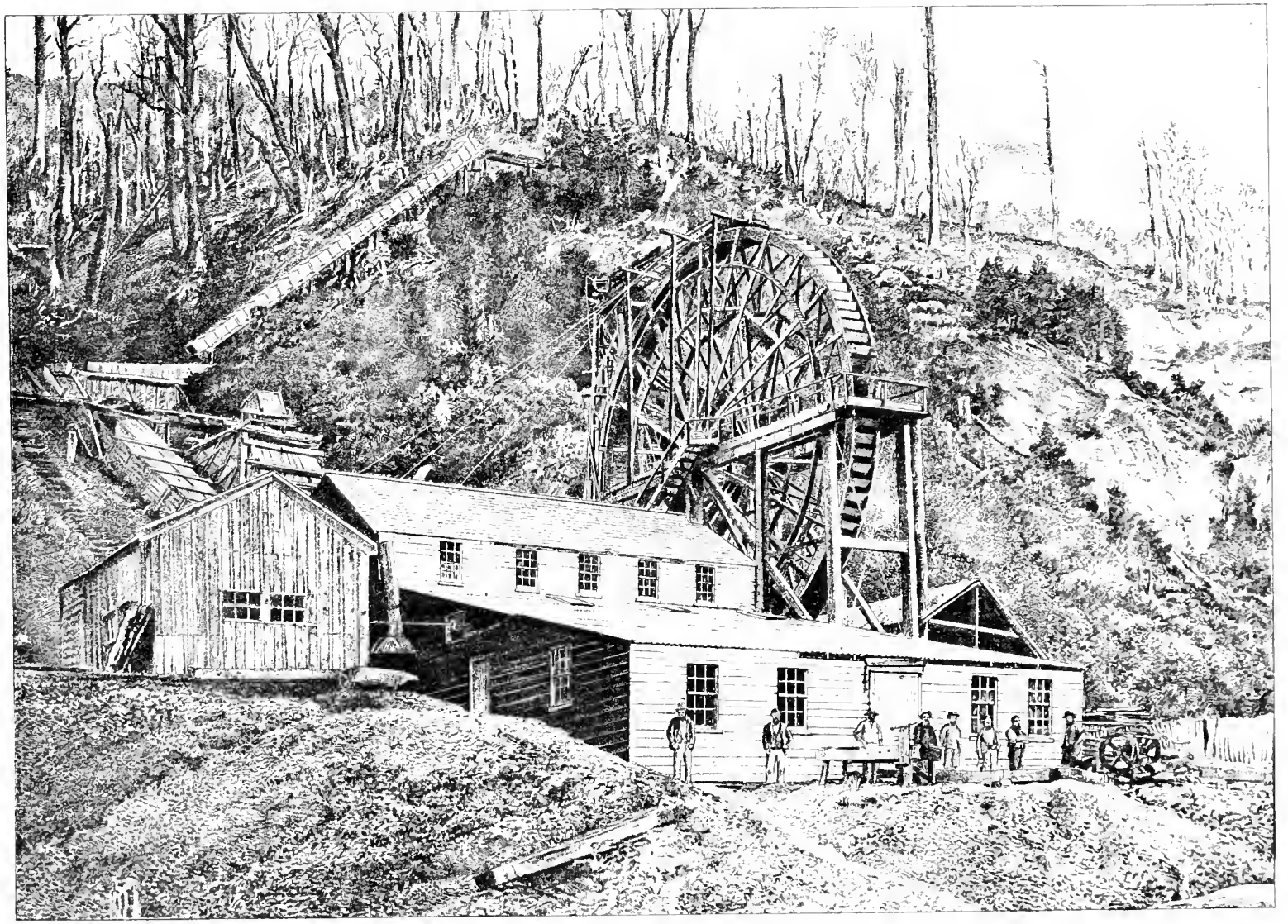
CHAPTER XVIII.

QUARTZ REEFS in the Inangahua district were first discovered in 1871. The discovery caused extreme excitement throughout every part of the coast, which soon extended to other parts of the Colony. Men of the largest experience in quartz-mining in Victoria, and at the Thames in the North Island, wandered hitherwards, the town of Reefton was laid out, and fabulous prices were speedily obtained for sections. The utmost difficulties had to be overcome in opening the earliest mines, and in getting crushing machinery on to several of the claims. After a year or two, handsome returns were obtained from three or four of the principal mines, and the field became fairly established. The population steadily increased, all the signs of prosperity became manifest, large hotels and stores were erected, and the lucky owners of them coined money. The "old, old story," often related of Sandhurst, Pleasant Creek, Inglewood, Gympie, Grahamstown, and other quartzopoles followed. The scrip mania set in, and every man and woman in the neighbourhood speculated to a greater or smaller extent. Between the years 1872 and 1881, the scrip fever prevailed on all sides, not continuously, but at sudden intervals. At times the excitement in the brokers' offices, and "under the verandahs," was intense. Crowds congregated every night, more particularly on Saturday nights, in the main street, and "not a sound was heard" but scrip, scrip, everywhere. What tales of luck, both good and bad, could such men as Patrick Brennan, Joseph Kilgour, Morris Levy, Matty Byrne, and many others, tell of those days when the epidemic was in full rage in Reefton! The temptation to speculate became positively irresistible, when it was no unusual occurrence to witness the most veritable "new chum," with possibly a better acquaintance with pewter quarts than golden quartz, converting a few five-pound notes into as many hundreds ere the sun had risen and set. Instances of this kind in Reefton were not far to seek. A quarter share in the once famous "Hopeful" claim, for instance, changed hands for what is known in sporting circles as a "pony," and in a few months after the purchase, the holder of the share was receiving dividends of hundreds of pounds every month. Again followed, as invariably happens, times of depression, and some of the self-same shares were shortly after forfeited for a sixpenny call. And such has been the history of Reefton; since its opening, subject to great fluctuation. The reefs in the Inangahua district extend over a vast area of country. Some of them have yielded their shareholders handsome returns, while many of them have come far short of expectation, and others again have ended in utter disappointment. The Welcome Company stands

foremost on the list of dividend-paying claims, and the Keep-it-Dark Company up to the present time takes second place. The Golden Fleece, Hopeful, Wealth of Nations, Energetic, Just-in-Time, Phœnix, Caledonian, Fiery Cross, Golden Treasure, and others, were all paying dividends some years ago, but the past year has been the worst, in respect to gold returns, that the Inangahua district has experienced since the reefs were in full swing. The Warden of the district, Mr Revell, in his last report to the Government, attributes the depression in a great measure to the rash speculations two years ago, the very heavy calls made during the past two years (amounting to no less than £110,801), and the non-success of some of the new undertakings. The estimated population on the 31st of March last, in the Inangahua district, was 2757, nearly half of whom were residing in the town of Reefton. The yield of gold for the last twelve months was—alluvial, 6307 ozs. of the value of £23,966, 12s.; from quartz reefs, 16,547 ozs. of the value of £64,456, 7s. 5d.: or a total value of £88,422, 19s. 5d. During the past twelve months reported on by the Warden, only three claims had paid dividends as follows:—Keep-it-Dark Company, £12,000; Fiery Cross Company, £3000; and Welcome Company, £1500. Forty-six Companies, during the same period, made calls on their shareholders amounting to £49,456, 5s.

Numerous seams of coal are in existence in this district, and there has recently been discovered veins of argentiferous galena, particles of stream tin and zinc-blende, copper, antimony, and other minerals.

An exciting incident and melancholy accident, which occurred during one of my rambles among the Reefton mines, is perhaps worthy of mention, as the narrow escape we had may act as a caution to those who, simply from curiosity, desire to enter long tunnels or deep shafts in mining claims. After spending a day at Boatman's Creek, viewing the then promising claims of the Hopeful, Welcome, Fiery Cross, and Just-in-Time Companies, watching the cleaning up of 1700 ozs. of amalgam from the Hopeful blankets, the result of the week's work, and others in smaller proportion, we arranged to spend the following day, 28th November 1876, at Black's Point, and at the Golden Fleece Company's claim. When we reached the company's battery, the rain came down in torrents, and all the small creeks around became suddenly flooded. Leaving the battery and reaching the engine house, we chatted for ten minutes with the engine driver, Thomas Williams, who remarked upon the heavy rainfall, but no danger was apprehended. I stepped on board the cage, along with Mr Trennery, mining manager of the company, when Williams lowered us down the shaft gently, as far as the fourth level to a depth of 330 ft., where we had a good look round the workings. Returning to the shaft, the mining manager rang the bell for the cage to take us to the next lower level. A truck full of quartz went up, and while we were waiting on the platform for the cage to return, a loud sounding voice was heard from the top of the shaft, calling out, "Look out, you fellows, below; we are getting flooded out here!" We rang the bell again, and for a few minutes got no answer. All this time I was watching every expression visible on Trennery's countenance. I dared not venture an opinion on the situation. He seemed



WEALTH OF NATIONS BATTERY. REEFTON

anxious to know what the next alarm would be. A second call brought down the loud cry from the top, "Engine and house carried away; engine-driver killed; come up the winze!" Off started Trennery up the muddy ladders, and all hands quickly behind him. When we reached the second level the rain was coming down in torrents. It had come down, we were told, like a waterspout, immediately after we entered the tunnel, and the whole place was flooded. The engine-house was smashed to atoms with a land slip, and poor Williams, the engine-driver, was killed by the engine falling on him. Two minutes more, and we would have been on our way up the shaft. I mention this as an instance, though rather an unusual one, of the dangers which do, at times, attend mining underground.

Mr Jonathan Harrison, F.G.S., writing to the *Colliery Guardian*, thus refers to his visit to the Reefton mines:—"I was highly interested when standing on the ranges, 1500 ft. above the river, to see such indications of enormous belts of gold-bearing quartz reefs, extending for miles, with a strike north and south; also looking south-east the mind is at once struck in contemplating the future greatness of this vast and inexhaustible gold-mining district. These ranges, whose tops and heights for hundreds of feet have been denuded of their micaceous slate, have parted with their precious metal from the eroded quartz reefs during the drift period. Nature has done a great deal to help the gold-mining in this country, as the rocks which have been ground down must have been something enormous in lifting up these huge ranges, and tearing and rending the rocks of slate into various forms and shapes. The quartz reefs, in the grinding process, have been pulverised so fine that they have parted with their gold, hence the enormous deposits of shingle or drift in the Grey Valley, and, in judging by the past, some of the reefs in the district will be found of great richness in the future.

"The reefs of the West Coast yield, on an average, 1 oz. 4 dwts. to the ton. This vast reefing country extends for two hundred miles, a large portion of which the foot of the white man has never trod. A large amount of slate rock is covered with drifts; the soft gold-bearing reefs have been carried down the creeks, clearly showing this is a fine field for a prospecting syndicate to raise money and go to work with a diamond drill. A prospecting license for three square miles can be taken up for one penny per acre for one year.

"In the Souvenier claim, at Reefton, a magnificent lode of rich antimony has been discovered 6 ft. in width and a great distance in length, this antimony carrying a good percentage of gold, making it of great value. The antimony, when smelted, is worth £70 per ton. The district is unique, and good openings are offered to English capitalists.

"On the proposed route of the East and West Coast railway from here *viâ* Reefton to Christchurch, and about thirty miles east of Reefton, the granite ranges set in, near which some stream tin, copper, and other minerals have been found."

WEST COAST FERNS.

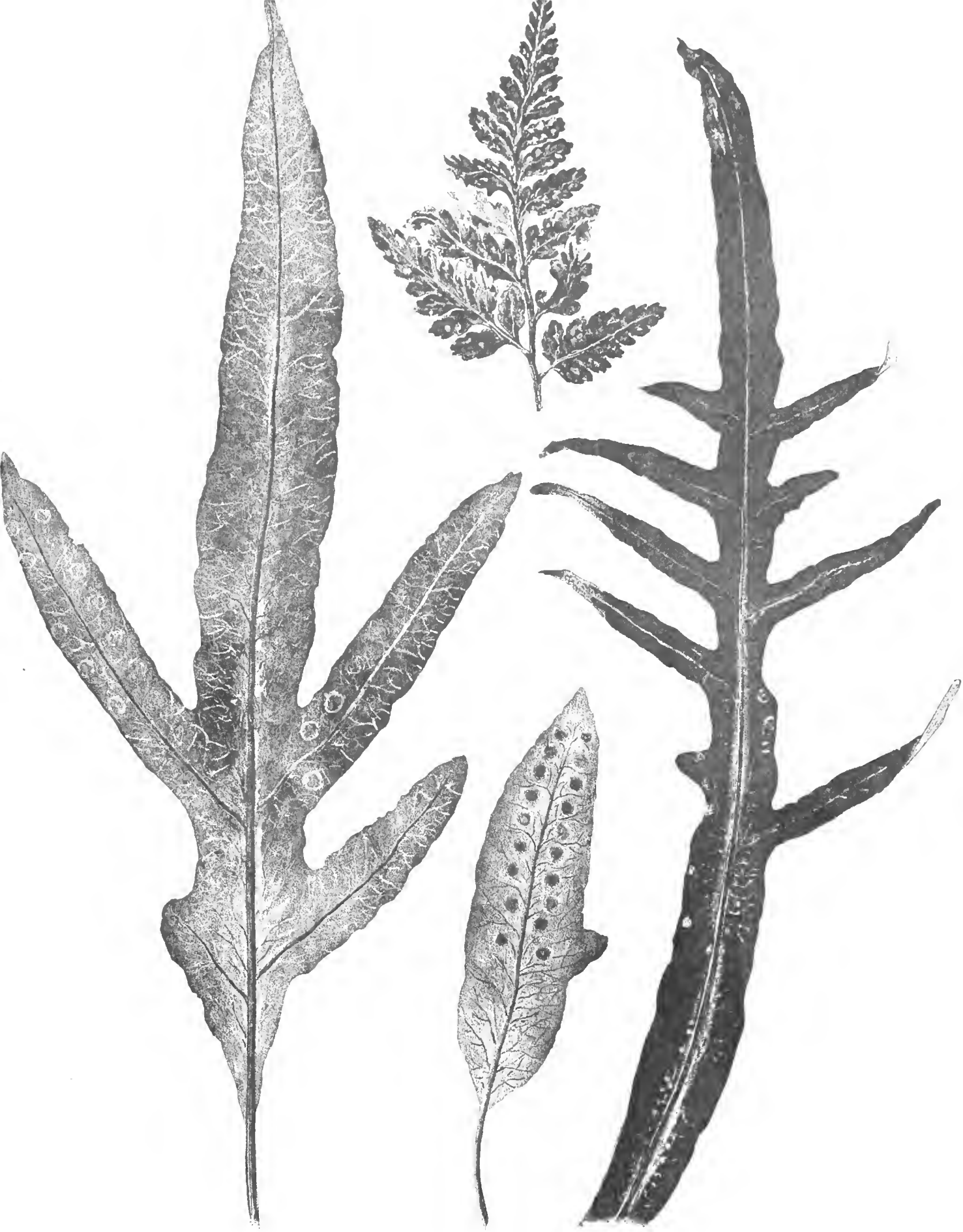
CHAPTER XIX.

DISTRIBUTED through this volume are four pages of specimens of ferns, gathered promiscuously on the coast. Opposite page 12 will be found at the foot of the page a specimen of the *Lomaria lanceolata;* next, above, fan shaped, the *Tricomanes reniforme;* at the top, central, the *Lycopodium prostatum;* on the right, the *Hymenophyllum flabellum;* and on the left, the *Hymenophyllum scabrum.* Opposite page 32 are small specimens of the *Lomaria procera,* the *Darallia Novæ Zealandiæ,* and the *Hymenophyllum villosum*—the latter on the right, and the two former on the left, side of the page. In the centre is the *Todea hymenophylloides,* and at the foot, centre, is the *Hypolepis tenuifolia.* Opposite page 44, on the top, are two small specimens of West Coast moss; in the centre, the *Asplenium bulbiferum;* on the right, the *Lomaria alpina;* on the left, the *Asplenium flaccidum.* Opposite page 174 are specimens of the *Polypodium Cunninghamii,* and at the top that of the *Polystichum capense.*

There are said to be about 300 different varieties of ferns in New Zealand, and 70 to 80 different varieties on the West Coast. Some varieties are to be found only in the Grey district, such as the *Asplenium lucidum,* the *Cyathea medullaris,* and the *Pteris macilenta.* These are not to be found either to the north or south, while others again, not to be met with in the Grey district, are in abundance on the banks of the rivers from the most northern point of the coast to the sounds in the south.

Several cases of roots of ferns are shipped every year to the neighbouring Colonies, and some have been ordered for England and America, where they have reached in good order. Mr F. J. Barker, nurseryman and florist, Arahura Nursery, near Hokitika, makes a specialty of preparing assorted cases for shipment and Mr Wells, toll collector at the Otira Gorge on the Christchurch road, disposes of a great many fern books containing numerous and well selected varieties, to tourists and others who come to view the wonderful scenery between the East and West Coasts.

Mr James Tait, of Hokitika, sent an excellent case of ferns—growing plants—to the Sydney International Exhibition, for which he was awarded a prize medal and certificate. He has also prepared a number of views, composed entirely of ferns and mosses, representing New Zealand scenery. Mr W. G. Johnston, of the same place, had on view, at the Melbourne Exhibition, some exceedingly artistic fern and moss work of this kind, which was the admiration of all who visited the New Zealand Court.



SPECIMENS OF WEST COAST FERNS.

WEST COAST FISH.

CHAPTER XX.

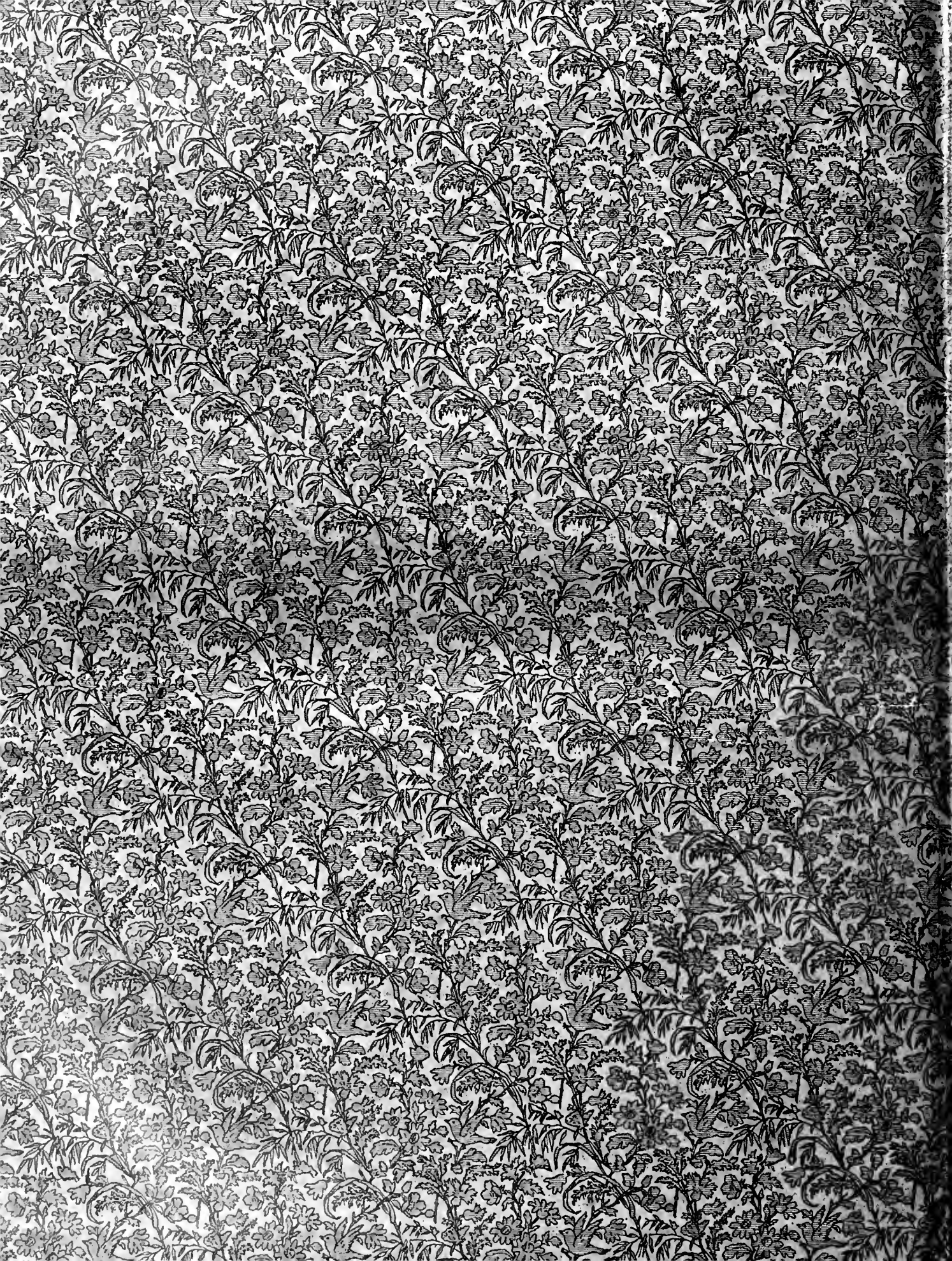
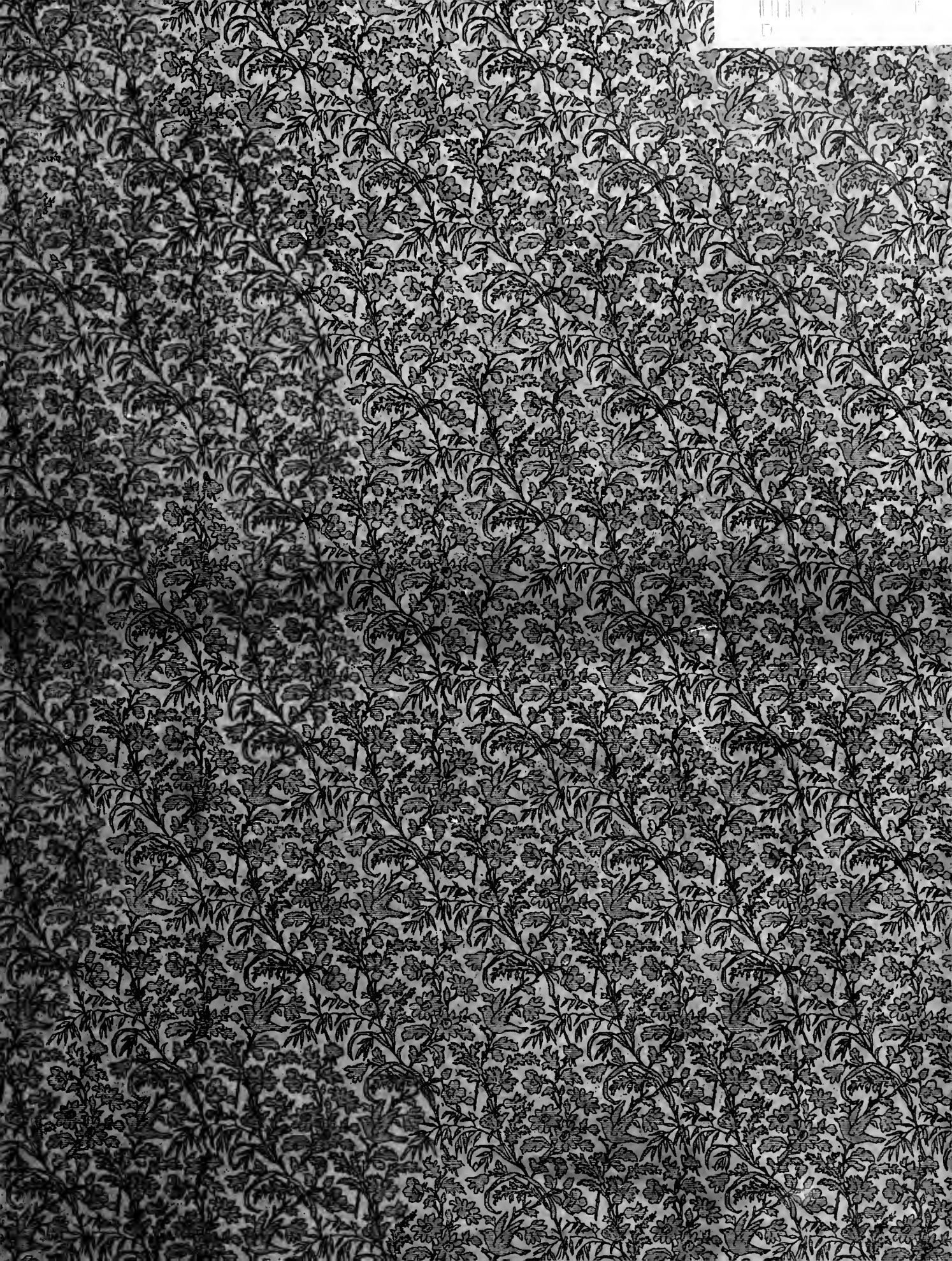
HAVING written so much upon the mineral and vegetable wealth of the "Golden Coast," my readers may not deem it irrelevant to speak of the tenants of the waters, both of the sea and inland lakes and rivers. The sea, bounding our strip of land for two hundred and twenty miles, together with our lakes and rivers, contain a wonderful supply of fish, both "materialistic" and "kalizoic." The "materialistic" fish represent edible varieties of good qualities and quantities, from the extreme 120 lbs. weight of the habuka or groper—a giant perch—to the minute but delicate whitebait, which singly weighs but a fraction of an ounce, though collectively it exemplifies the old adage "Union is strength." These little fish are caught and sold by the pint, peck, or bushel, and have become a food factor in their season (from August to November), as well as a means of livelihood to numbers of the almond-eyed sons of the Celestial Empire. Besides supplying the inhabitants of the towns with the delicacy, they dry and export them to China. There the dried commodity must obtain a high price, equal probably to the famed gelatinous "birds' nests," as the price paid by the Victorian Chinese middlemen is said to be 2s. 6d. per lb.

Flounders, of various varieties, inhabiting fresh, brackish, and salt waters, all of good quality, and nearly allied to the English turbot; a species of sole, larger than the English one; the trumpeter, a fish of excellent repute throughout the Australian Colonies; moki and parihiki, bream-shaped fish of good flavour; two or three varieties of cod fish; a species of ling; the well-known schnapper and barracouta; a species of sardine; a true herring, very like the Home herring, but not equal in flavour, and a score of others, abound in these waters.

The "materialistic" fish of the fresh waters are few; the greyling, a fish good for the table, affording sport akin to roach fishing, and reaching a maximum weight of 3 lbs., being the best. The lakes, rivers, creeks, and pools teem with eels, some of incredible size and weight.

The "kalizoic" fish embrace varieties rare, unique, and grotesque, and many of excessively beautiful colouring. Amongst the kalizoic division are two of the deep-sea light-giving fish, a kindred variety of which is being experimented on in Europe at the present time by a scientist, who expects to develop from them the light of the future. This light is given in phosphorescent sparkles from the little bead-like processes along the lower sides of each. Another species of the renowned "frost fish," but unlike the ordinary frost fish, it is of much greater length in proportion to depth. It well

deserves its proper cognomen of the scabbard fish, its silver skin adding to the resemblance. Another fish with formidable spines on its shoulders is the "bull," or "tide fish," as it is called in one of the other Colonies, where its spines, and the poisonous wounds it inflicts, are looked upon by most of the fisher folk with dread and superstition. There is also a small variety of rare ocean fish, very high and thin, with quite a superabundance of fins. Its colour is bright metallic silver, fins vivid scarlet; its congeners grow to a length of 16 or 17 ft., depth 18 to 20 inches, and thickness of 1 to 2 inches only. Another which should specially be mentioned is the particular form of "angler fish," as it is the first and only specimen noted as obtained in the world, having been washed up on our beach after a severe storm. It is provided with rod, lines, and lures, and a capacious "creel" for its victims.

A peculiar fresh-water fish which has attracted attention amongst savans and others is the "West Coast mud fish," a fish which was once supposed to take to and reside in the mud from choice. It has often been excavated from considerable depths in the clayey soil. Its living interment is usually from necessity. As the waters dry up it is forced to wriggle into the mud, at the bottom or sides of the swampy pools it inhabits. In some instances it has been known to follow down the moisture in holes left by decaying roots, and get a considerable depth underground. When the surface of the ground has been perfectly dry, and the whole cleared and improved, the discovery of a healthy living fish, 5 or 6 ft. under dry solid ground, has been made, and has been looked upon by the spectator, at first sight, as truly miraculous. Its usual habitat is the pools and small creeks in swampy grounds, where it remains, freely swimming, nearly all the year round, reproducing from ova, as with most fish, in September or October, and the young fry, half an inch in length, can be obtained in January.

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